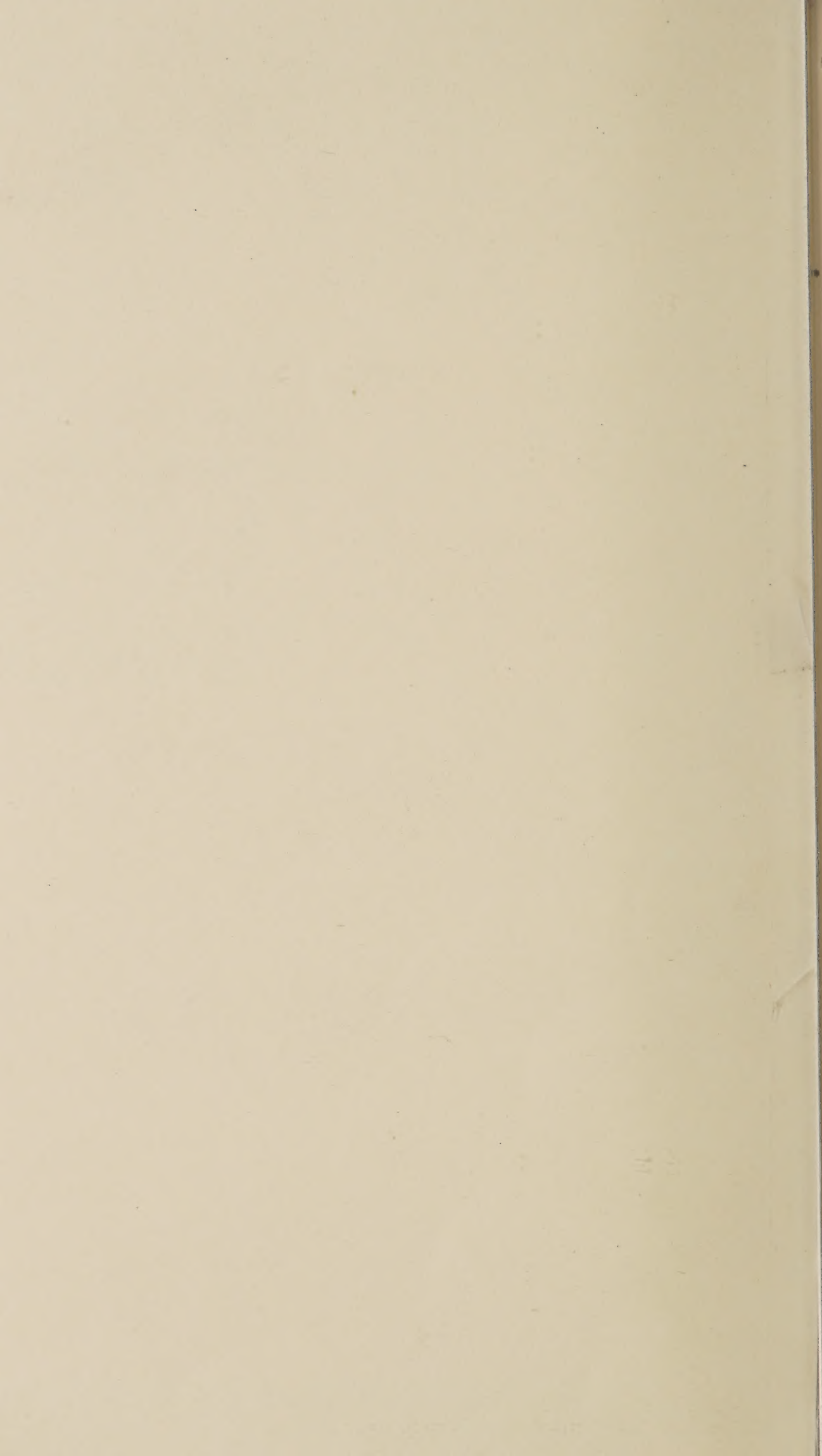


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No. 436.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *January 31, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[January, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Annual Reports of the Department of Agriculture for the Fiscal Year Ended June 30, 1901. Report of the Secretary of Agriculture. Departmental Reports. Pp. cxv, 1-344. Cloth.

CONTENTS: New building needed—Our duty to new possessions—Summary—Weather Bureau—Bureau of Animal Industry—Bureau of Plant Industry—Bureau of Soils—Bureau of Chemistry—Bureau of Forestry—Office of Experiment Stations—Division of Entomology—Office of Public Road Inquiries—Division of Publications—Section of Foreign Markets—Library—Division of Accounts and Disbursements—Biological Survey—Division of Statistics—Salaries inadequate.

Contributions from the U. S. National Herbarium. Vol. VII, No. 3. Plants used by the Indians of Mendocino County, California. By V. K. Chesnut. Pp. vi, 295-408, vii, pls. 12, figs. 13. Price 15 cents.

Proceedings of the Thirteenth Annual Meeting of the Association of Economic Entomologists. Pp. 103, pls. 2, figs. 4. (Bulletin No. 31, new series, Division of Entomology.) Price 10 cents.

Experiment Station Record, Vol. XIII, No. 4. E. W. Allen, Ph. D., Editor. Pp. vii, 301-400. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Range Improvement in Arizona. (Cooperative experiments with the Arizona Experiment Station.) By David Griffiths, Expert, in Charge of Field Management, Grass, and Forage Plant Investigations. Pp. 31, pls. 6, figs. 5. (Bulletin No. 4, Bureau of Plant Industry.) Price 10 cents.

Outline of experiments undertaken on the tract of public land set aside by the President of the United States for the use of the Secretary of Agriculture in this work. The existing conditions and the present character of the forage supply on the ranges are fully described.

Seeds and Plants Imported through the Section of Seed and Plant Introduction for Distribution in Cooperation with the Agricultural Experiment Stations. Inventory No. 9, Numbers 3451-5500. Pp. 79. (Bulletin No. 5, Bureau of Plant Industry.) Price 10 cents.

Crop Reporter. Vol. 3, No. 9. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

Suggestions to Prospective Forest Students. By Gifford Pinchot, Forester. Pp. 5. (Circular No. 23, Bureau of Forestry.)

Contains information for those who desire to adopt forestry as a profession.

Monthly List of Publications. December, 1901. Pp. 4. (No. 432, Division of Publications.)

List of National, State, and Local Road Associations and Kindred Organizations in the United States. By Martin Dodge, Director. Pp. 13. (Circular No. 36, Office of Public Road Inquiries.)

Soil Survey Around Imperial, Cal. By Thos. H. Means and J. Garnett Holmes. Pp. 20, figs. 2. (Circular No. 9, Bureau of Soils.)

REPRINTS.

Progress of the Beet-Sugar Industry in the United States in 1900. By Charles F. Saylor, Special Agent, and H. W. Wiley, Chemist. Pp. 178. (Report No. 69.) Price 10 cents.

American Ginseng: Its Commercial History, Protection, and Cultivation. By George V. Nash. Revised and extended by Maurice G. Kains. Pp. 32, figs. 5. (Bulletin No. 16, Division of Botany.) Revised edition. Price 5 cents.

The Reservoir System of the Cache La Poudre Valley. By E. S. Nettleton. Pp. 48, pls. 14. (Bulletin No. 92, Office of Experiment Stations.) Price 15 cents.

Studies on Bread and Bread Making at the University of Minnesota in 1899 and 1900. By Harry Snyder, B. S., Professor of Chemistry, College of Agriculture, University of Minnesota, and Chemist, Agricultural Experiment Station. Pp. 65, pls. 3, fig. 1. (Bulletin No. 101, Office of Experiment Stations.) Price 10 cents.

Experiments on Losses in Cooking Meat. 1898-1900. By H. S. Grindley, D. Sc., Associate Professor of Chemistry, College of Science, University of Illinois, with the cooperation of H. McCormack, M. S., and H. C. Porter, M. S. Pp. 64. (Bulletin No. 102, Office of Experiment Stations.) Price 5 cents.

Irrigation in the United States. Testimony of Elwood Mead, Irrigation Expert in Charge, Before the United States Industrial Commission, June 11 and 12, 1901. Reprinted from Report of United States Industrial Commission on Agriculture and Agricultural Labor. Pp. 47, pls. 12, fig. 1. (Bulletin No. 105, Office of Experiment Stations.) Price 15 cents.

Sources of the Agricultural Imports of the United States, 1896-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 120. (Bulletin No. 24, Section of Foreign Markets.) Price 10 cents.

Distribution of the Agricultural Exports of the United States, 1896-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 182. (Bulletin No. 25, Section of Foreign Markets.) Price 10 cents.

The Functions and Uses of Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 10. (Circular No. 46, Office of Experiment Stations.)

Jarring for the Curculio on an Extensive Scale in Georgia, With a List of the Insects Caught. By W. M. Scott and W. F. Fiske, Atlanta, Ga. Pp. iii, 24-36. (Reprinted from Bulletin No. 31, Division of Entomology, new series, Proceedings of the Thirteenth Annual Meeting of the Association of Economic Entomologists.)

The Ash Constituents of Plants: Their Estimation and Their Importance to Agricultural Chemistry and Agriculture. By B. Tollens, Ph. D., Director of the Agricultural-Chemical Laboratory, University of Göttingen. Pp. ii, 207-220, 305-317. (Reprinted from Experiment Station Record, Vol. XIII, Nos. 3 and 4.)

The Agricultural Situation in California. By Elwood Mead, Irrigation Expert in Charge. Pp. iv, 17-69, 397-400, pls. 6. (Reprinted from U. S. Department of Agriculture, Office of Experiment Stations, Bulletin 100, Report of Irrigation Investigations in California.)

FARMERS' BULLETINS.

Experiment Station Work—XIX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 9. (Farmers' Bulletin No. 144.)

Maintenance of soil fertility—Thomas slag—Rotation of crops—Gardening under glass—Winter irrigation of orchards—Improvement of American grapes—Condimental and medicinal cattle and poultry foods—Feeding rice meal to pigs—Dressing and packing poultry—The curing of cheese—An improved cow stall.

Carbon Bisulphid as an Insecticide. By W. E. Hinds, Temporary Assistant of the Division of Entomology. Pp. 28. (Farmers' Bulletin No. 145.)

The use of bisulphid of carbon for the destruction of insects injurious to stored products, underground insects, household pests, museum pests, tree borers, and sucking insects on small plants.

REPRINTS.

Grape Diseases on the Pacific Coast. By Newton B. Pierce, Division of Vegetable Physiology and Pathology. Pp. 15, figs. 3. (Farmers' Bulletin No. 30.)

Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. (Farmers' Bulletin No. 42.)

Experiment Station Work—II. Prepared in the Office of Experiment Stations. Pp. 32, figs. 7. (Farmers' Bulletin No. 65.)

Forestry for Farmers. By B. E. Fernow, Chief of the Division of Forestry. [Reprinted from the Yearbooks of the U. S. Department of Agriculture for 1894 and 1895.] Pp. 48, figs. 15. (Farmers' Bulletin No. 67.)

Experiment Station Work—III. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 69.)

The Principal Insect Enemies of the Grape. By C. L. Marlatt, M. S., First Assistant Entomologist. [Reprinted from original plates from the Yearbook of the U. S. Department of Agriculture for 1895.] Pp. 23, figs. 12. (Farmers Bulletin No. 70.)

The Peach Twig-Borer: An Important Enemy of Stone Fruits. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 16, figs. 5. (Farmers' Bulletin No. 80.)

Saltbushes. By P. Beveridge Kennedy, Ph. D., Assistant in the Division of Agrostology. Prepared under the direction of the Agrostologist. Pp. 20, figs. 9. (Farmers' Bulletin No. 108.)

Irrigation in Fruit Growing. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Experiment Station. Pp. 48, figs. 8. (Farmers' Bulletin No. 116.)

Experiment Station Work—XV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 31, figs. 5. (Farmers' Bulletin No. 119.)

Protection of Food Products from Injurious Temperatures. By H. E. Williams, Chief Clerk, Weather Bureau. Pp. 26. (Farmers' Bulletin No. 125.)

Practical Suggestions for Farm Buildings. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)

The Mexican Cotton-Boll Weevil. By Frederick W. Mally, M. Sc., Professor of Entomology, Agricultural and Mechanical College, College Station, Texas. Pp. 30, figs. 4. (Farmers' Bulletin No. 130.)

Irrigation in Field and Garden. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Agricultural Experiment Station. Pp. 40, figs. 18. (Farmers' Bulletin No. 138.)

Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 141.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Report of the Chief of the Weather Bureau, 1900-1901. By Willis L. Moore. (In two volumes.) Vol. I. Pp. 318. Cloth.

Monthly Weather Review, November, 1901. Vol. XXIX, No. 11. Pp. 489-533, charts 13. (W. B. No. 257.) Price 20 cents.

Meteorological Chart of the Great Lakes. Summary for the season of 1901. No. 2, 1901. By Alfred J. Henry and Norman B. Conger. Prepared under direction of Willis L. Moore, Chief of U. S. Weather Bureau. Pp. 32, charts 13. (W. B. No. 258.)

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 32, for the month of December, 1901.)

Snow and Ice Bulletins for Tuesdays, January 7, 14, 21, and 28. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau Stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

[From Annual Reports, Department of Agriculture.]

- Report of the Chief of the Bureau of Animal Industry for 1901.
By D. E. Salmon. Pp. iv, 15-42.
- Report of the Chief of the Bureau of Plant Industry for 1901. By
B. T. Galloway. Pp. iii, 43-94.
- Report of the Chemist for 1901. By H. W. Wiley. Pp. ii, 95-111.
- Report of the Chief of the Division of Soils for 1901. By Milton
Whitney. Pp. iii, 113-140.
- Report of the Entomologist for 1901. By L. O. Howard. Pp. ii,
141-150.
- Report of the Acting Chief of the Biological Survey for 1901. By
T. S. Palmer. Pp. iii, 151-162.
- Report of the Chief of the Section of Foreign Markets for 1901.
By Frank H. Hitchcock. Pp. iii, 163-169.
- Report of the Librarian for 1901. By Josephine A. Clark. Pp. iii,
171-173.
- Report of the Director of the Office of Experiment Stations for 1901.
By A. C. True. Pp. iii, 175-233.
- Report of the Office of Public Road Inquiries for 1901. By Martin
Dodge, Director. Pp. iii, 235-252.
- Report of the Chief of the Division of Accounts and Disburse-
ments for 1901. By F. L. Evans. Pp. iii, 253-269.
- Report of the Editor for 1901. By Geo. Wm. Hill. Pp. iii, 271-324.
- Report of the Forester for 1901. By Gifford Pinchot. Pp. iii, 325-
339.

GEO. WM. HILL,
Editor and Chief.

Approved:

JAMES WILSON,
Secretary of Agriculture.

NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, of the Bureau of Animal Industry, of the Bureau of Soils, and of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

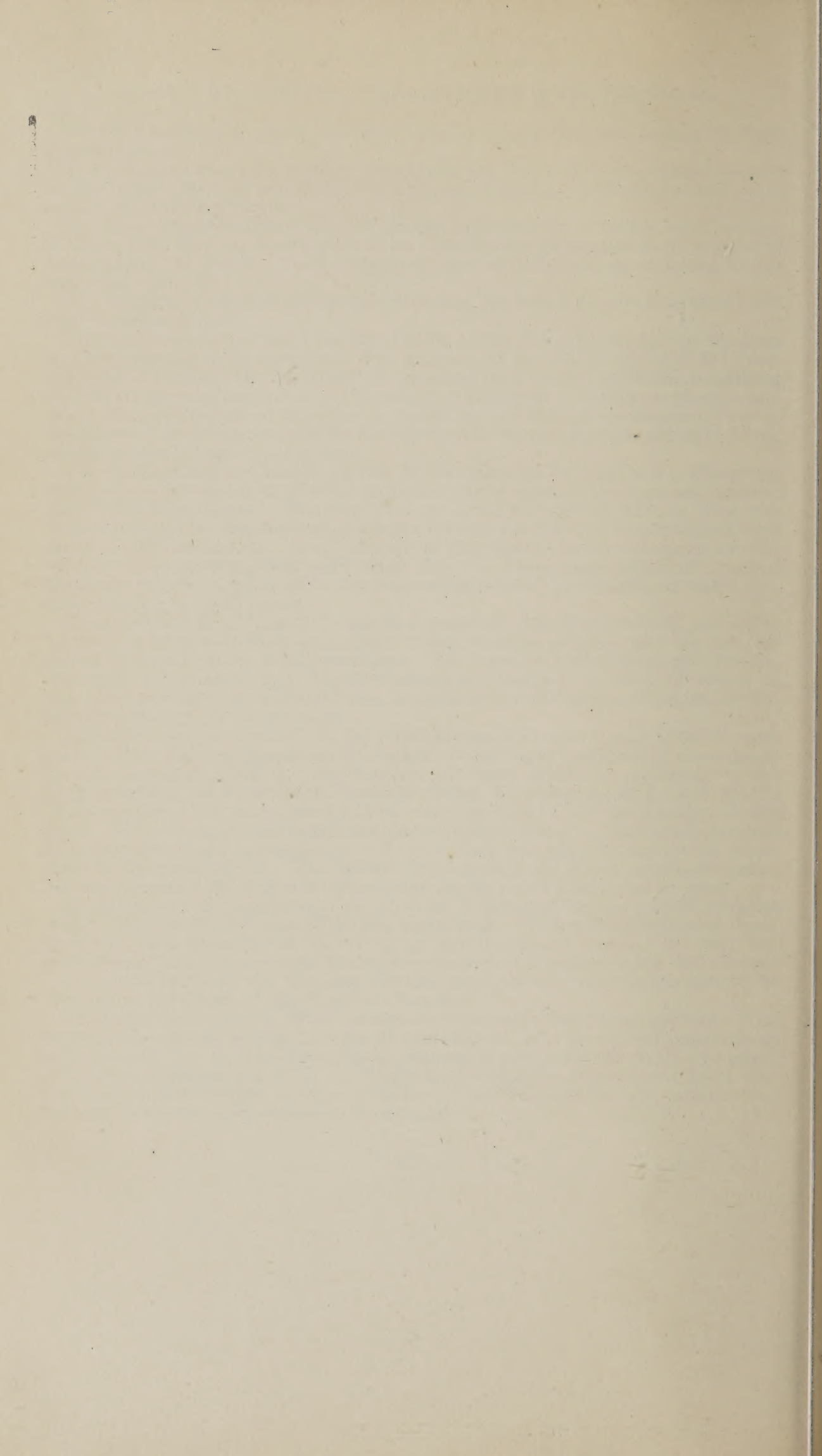
The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.



This circular will be sent regularly to all who apply for it.

No. 437.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *February 28, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[February, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

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The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Some Mutual Relations Between Alkali Soils and Vegetation. By Thomas H. Kearney, Assistant Physiologist, Division of Vegetable Physiology and Pathology, and Frank K. Cameron, Soil Chemist, Division of Soils. Pp. 78. (Report No. 71.) Price 5 cents.

Nutrition Investigations Among Fruitarians and Chinese at the California Agricultural Experiment Station, 1899–1901. By M. E. Jaffa, M. S., Assistant Professor of Agriculture, University of California. Pp. 43, pl. 1. (Bulletin No. 107, Office of Experiment Stations.) Price 5 cents.

Experiment Station Record, Vol. XIII, No. 5. E. W. Allen, Ph. D., Editor. Pp. vii, 301–500. Price 10 cents.

Experiment Station Record, Vol. XIII, No. 6. E. W. Allen, Ph. D., Editor. Pp. vii, 501–604. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Catalogue of the Periodicals and Other Serial Publications (Exclusive of U. S. Government Publications) in the Library of the U. S. Department of Agriculture. Prepared under the direction of Josephine A. Clark, Librarian. Pp. 362. (Library Bulletin No. 37.) Price 20 cents.

Accessions to the Department Library. October–December, 1901. Pp. 24. (Library Bulletin No. 39.) Price 5 cents.

A List of American Varieties of Peppers. By W. W. Tracy, Jr., Assistant, Botanical Investigations and Experiments. Pp. 19. (Bulletin No. 6, Bureau of Plant Industry.) Price 10 cents.

A Collection of Economic and Other Fungi Prepared for Distribution. By Flora W. Patterson, Mycologist, Vegetable Pathological and Physiological Investigations. Pp. 31. (Bulletin No. 8, Bureau of Plant Industry.) Price 10 cents.

The North American Species of *Spartina*. By Elmer D. Merrill, Assistant Agrostologist, Grass and Forage Plant Investigations. Pp. 16. (Bulletin No. 9, Bureau of Plant Industry.) Price 10 cents.

Bibliography, synonymy, and relationships of the several species which compose the genus of *spartina*.

Records of Seed Distribution and Cooperative Experiments with Grasses and Forage Plants. By F. Lamson-Scribner, Agrostologist, Grass and Forage Plant Investigations. Pp. 23. (Bulletin No. 10, Bureau of Plant Industry.) Price 10 cents.

Johnson Grass: Report of Investigations Made During the Season of 1901. By Carleton R. Ball, Assistant Agrostologist, Grass and Forage Plant Investigations. Pp. 24, pl. 1, fig. 1. (Bulletin No. 11, Bureau of Plant Industry.) Price 10 cents.

Field Operations of the Division of Soils, 1900. By Milton Whitney, Chief. With accompanying papers by Thomas H. Means, Frank D. Gardner, Clarence W. Dorsey, Jay A. Bonsteel, J. Garnett Holmes, Frank K. Cameron, Lyman J. Briggs, Marcus L. Floyd, William G. Smith. Pp. 473, pls. 51, figs. 47, maps 24. Cloth. (Second report.) Congressional publication, for distribution by Senators and Representatives.

Changes in the Rates of Charge for Railway and Other Transportation Services. By H. T. Newcomb. Revised by Edward G. Ward, jr., Expert in Transportation Statistics. Pp. 86. (Bulletin No. 15, miscellaneous series, Division of Statistics.) Revised edition. Price 5 cents.

Crop Reporter. Vol. 3, No. 10. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.

The Fig: Its History, Culture, and Curing, with a Descriptive Catalogue of the Known Varieties of Figs. By Gustav Eisen, Ph. D. Pp. 317, frontispiece, pls. 15, figs. 93. (Bulletin No. 9, Division of Pomology.) Price 35 cents.

Contains a complete history of the fig, describes in detail the methods of culture in various countries, and gives information in relation to drying, curing, packing, and shipping. The edition was limited to 1,000 copies, and it is therefore not available for miscellaneous distribution.

A Plan for Cooperating in the Study of Available Plant Food. By C. C. Moore, in Charge of Soil Analysis Laboratory. Pp. 8, figs. 3. (Circular No. 9, Bureau of Chemistry.)

Monthly List of Publications. January, 1902. Pp. 6. (No. 436, Division of Publications.)

Statistics of Oleomargarine, Oleo Oil, and Filled Cheese, 1900 and 1901. Pp. 22. (Senate Doc. No. 168, 57th Cong., 1st sess.)

REPRINTS.

Progress of the Beet-Sugar Industry in the United States in 1898. Part I, by Charles F. Saylor, Special Agent. Part II, by H. W. Wiley, Chemist of the U. S. Department of Agriculture. Pp. 162. (Printed by resolution of Congress.)

Rabies: Its Cause, Frequency, and Treatment. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 211-246. (Reprinted from Yearbook of Department of Agriculture for 1900.)

- Market Milk: A Plan for Its Improvement. By R. A. Pearson, M. S., Assistant Chief of Dairy Division. Pp. iii, 158-193, pls. 10. [Reprint from the Seventeenth Annual Report of the Bureau of Animal Industry (1900).]
- Dairy Products at the Paris Exposition of 1900. By Henry E. Alvord, Chief of the Dairy Division, Bureau of Animal Industry, in Charge of the United States Animal Industry Exhibit at Paris. Pp. iii, 194-222, pls. 10. [Reprint from the Seventeenth Annual Report of the Bureau of Animal Industry (1900).]
- Verminous Diseases of Cattle, Sheep, and Goats in Texas. By Ch. Wardell Stiles, Ph. D., Zoologist of Bureau of Animal Industry. Pp. iii, 356-379. [Reprint from Seventeenth Annual Report of Bureau of Animal Industry (1900).]
- Report of the Chief of the Section of Foreign Markets for 1901. By Frank H. Hitchcock. Pp. iii, 163-169. (From Annual Reports, Department of Agriculture.)
- Report of the Office of Public Road Inquiries for 1901. By Martin Dodge, Director. Pp. iii, 235-252. (From Annual Reports, Department of Agriculture.)
- Report upon the Forestry Investigations of the U. S. Department of Agriculture. 1877-1898. By B. E. Fernow, formerly Chief of the Division of Forestry, U. S. Department of Agriculture. Pp. 401, pls. 32, figs. 105. (House Doc. No. 181, 55th Cong. 3d Sess.)
- Directions for the Destruction of Prairie Dogs. By C. Hart Merriam, Chief, Biological Survey. Pp. 2. (Circular No. 32, Division of Biological Survey.) Revised edition.
- Soil Survey Around Imperial, Cal. By Thos. H. Means and J. Garnett Holmes. Pp. 20, figs. 2. (Circular No. 9, Bureau of Soils.)

FARMERS' BULLETINS.

Earth Roads. By Maurice O. Eldridge, Assistant Director, Public Road Inquiries. Pp. 24, figs. 20. (Farmers' Bulletin No. 136.)

Calls attention to various errors in laying out roads and gives suggestions for the construction, maintenance, and repair of earth roads.

Conformation of Beef and Dairy Cattle. By Andrew M. Soule, Professor of Agriculture, and Vice-Director of Tennessee Agricultural Experiment Station. Pp. 44, figs. 44. (Farmers' Bulletin No. 143.)

Some information for stock feeders, breeders, and farmers, relative to the judging of cattle by sight and touch.

Insecticides and Fungicides: Chemical Composition and Effectiveness of Certain Preparations. By J. K. Haywood, in Charge of Insecticide and Agricultural Water Laboratory, Bureau of Chemistry. Prepared under the direction of H. W. Wiley, Chief Chemist, cooperating with the Division of Entomology. Pp. 16. (Farmers' Bulletin No. 146.)

The results of an elaborate study of the insecticides found in the American markets, showing the chemical composition and effectiveness of certain preparations.

REPRINTS.

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 44. (Farmers' Bulletin No. 22.) Revised edition.

Peach Growing for Market. By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 24, figs. 21. (Farmers' Bulletin No. 33.)

Fowls; Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)

Experiment Station Work—VII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 8. (Farmers' Bulletin No. 84.)

Potato Diseases and Their Treatment. By B. T. Galloway, Chief of the Division of Vegetable Physiology and Pathology. Pp. 12, figs. 4. (Farmers' Bulletin No. 91.)

Experiment Station Work—XII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 4. (Farmers' Bulletin No. 105.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Loss of Life in the United States by Lightning. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. By Alfred J. Henry, Professor of Meteorology. Pp. 21, pls. 4. (Bulletin No. 30, Weather Bureau.) (W. B. No. 256.) Price 10 cents.

Monthly Weather Review. December, 1901. Vol. XXIX, No. 12. Pp. 535-589, charts 10. (W. B. No. 259.) Price 20 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 1, for the month of January, 1901.)

Snow and Ice Bulletins for Tuesdays, February 4, 11, 18, and 25. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau Stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

(Reprinted from Bulletin No. 100, Office of Experiment Stations, U. S. Department of Agriculture. Report of Irrigation Investigations in California.)

Features and Water Rights of Yuba River, California. By Marsden Manson, C. E., Ph. D. Pp. iv, 115-154, pls. 3, figs. 4.

Irrigation Investigations on Cache Creek. By J. M. Wilson, C. E., Agent and Expert, Irrigation Investigations. Pp. iv, 155-191, pls. 8.

Report of Irrigation Problems in the Salinas Valley. By Charles D. Marx, Professor of Civil Engineering in Leland Stanford, Jr., University. Pp. iv, 193-213, pls. 2, figs. 7.

Problems of Water Storage on Torrential Streams of Southern California as Typified by Sweetwater and Jacinto Rivers. By James D. Schuyler, Hydraulic Engineer. Pp. iii, 353-395, pls. 2.

GEO. WM. HILL,
Editor and Chief.

Approved:

JAMES WILSON,

Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.
No. 439.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *March 31, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[March, 1902.]

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The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Seventeenth Annual Report of the Bureau of Animal Industry for the Year 1900. Pp. 642, pls. 98, figs. 238.

CONTENTS: Report of the Chief of the Bureau—The free distribution of black-leg vaccine: Results, prospects, and cost—Pathological conditions found in meat inspection—International Live-Stock Exposition of 1900—The work against sheep scab—Ocean transportation of cattle and horses—Plant poisoning of stock in Montana—Rabies: Its cause, frequency, and treatment—Market milk: A plan for its improvement—Dairy products at the Paris Exposition of 1900—Meats and meat products at the Paris Exposition of 1900—Poultry raising on the farm—Chinese incubators—The Thirteenth International Medical Congress—The Tenth International Congress of Hygiene and Demography—The bacillus of tuberculosis—Information concerning the Angora goat—Verminous diseases of cattle, sheep, and goats in Texas—The cattle ticks of the United States—Contagious diseases of animals in foreign countries—Miscellaneous information—The Imperial German meat-inspection law—Imports and exports of animals and animal products—Statistics of the animal industry of Australasia—Live stock and the markets—Production of wool in the United States—World's wool production in 1900—Rules and regulations of the Bureau of Animal Industry issued in 1900.

This is a Congressional publication, and but a limited number is assigned to the Department, the remainder being for distribution by Senators, Representatives, and Delegates in Congress. Price 85 cents, cloth.

Apoplectiform Septicemia in Chickens. Preliminary Report on a Highly Fatal Disease Caused by a Nonpyogenic Streptococcus. By Victor A. Nørgaard, V. S. (Copenhagen), Chief of Pathological Division, Bureau of Animal Industry, and John R. Mohler, V. M. D., Acting Assistant Chief of Pathological Division of Bureau of Animal Industry. Pp. 24, pls. 4. (Bulletin No. 36, Bureau of Animal Industry.) Price 10 cents.

Market Classes of Horses. By George M. Rommel, B. S. A., Expert in Animal Husbandry, Bureau of Animal Industry. Pp. 32, frontispiece, pls. 11. (Bulletin No. 37, Bureau of Animal Industry.) Price 15 cents.

Information for horse raisers, including descriptions of the various market classes and types of horses, and causes of the depression in the horse business, and of present scarcity.

Description and Treatment of Scabies in Cattle. By Richard W. Hickman, V. M. D., Chief of Miscellaneous Division, Bureau of Animal Industry. Pp. 23, frontispiece, figs. 16. (Bulletin No. 40, Bureau of Animal Industry.) Price 5 cents.

Description of a cattle disease known as Texas itch, cattle itch, and cattle mange, together with methods of treatment.

Legislation for the Protection of Birds Other Than Game Birds. By T. S. Palmer, Assistant Chief, Biological Survey. Pp. 143, pls. 4, figs. 7. (Bulletin No. 12, Division of Biological Survey.) Revised edition. Price 10 cents.

Report of Irrigation Investigations for 1900 Under the Supervision of Elwood Mead, Expert in Charge of Irrigation Investigations. Including Reports by Special Agents and Observers, W. M. Reed, W. H. Code, A. J. McClatchie, W. Irving, J. M. Wilson, R. C. Gemmell, G. L. Swendsen, O. V. P. Stout, W. H. Fairfield, D. W. Ross, O. L. Waller, S. Fortier, and J. C. Nagle. Pp. 334, pls. 25, figs. 29. (Bulletin No. 104, Office of Experiment Stations.) Price 50 cents.

Irrigation Practice Among Fruit Growers on the Pacific Coast. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Agricultural Experiment Station. Pp. 54, pls. 10, figs. 7. (Bulletin No. 108, Office of Experiment Stations.) Price 15 cents.

Results of a special investigation into the conditions, extent, and methods of irrigation as practiced among fruit growers on the Pacific coast.

Proceedings of the Sixth Annual Meeting of the American Association of Farmers' Institute Workers, held at Buffalo, N. Y., September 18 and 19, 1901. Edited by A. C. True and D. J. Crosby, for the Office of Experiment Stations, and G. C. Creelman, for the Association. Pp. 55. (Bulletin No. 110, Office of Experiment Stations.) Price 5 cents.

The Decay of Timber and Methods of Preventing It. By Hermann Von Schrenk, Instructor in Henry Shaw School of Botany and Special Agent in Charge of Mississippi Valley Laboratory, Vegetable Pathological and Physiological Investigations. Pp. 96, pls. 18, figs. 27. (Bulletin No. 14, Bureau of Plant Industry.) Price 55 cents.

A discussion of the factors which cause the decay of wood, an account of the various methods used in this country and abroad for preserving timber, and also an account of original work conducted to test various methods.

Crop Reporter. Vol. 3, No. 11. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 4.

A three-column quarto publication devoted to agricultural topics.

Methods for the Analysis of Insecticides and Fungicides. By J. K. Haywood, In Charge of Insecticide and Agricultural Water Laboratory. Pp. 8. (Circular No. 10, Bureau of Chemistry.)

The Periodical Cicada in 1902. By W. D. Hunter, Investigator, Division of Entomology. Pp. 4, figs. 2. (Circular No. 44, second series, Division of Entomology.)

Monthly List of Publications. February, 1902. Pp. 4. (No. 437, Division of Publications.)

List of Bulletins and Circulars Issued by the U. S. Department of Agriculture Available for Free Distribution. Corrected to January 1, 1902. Pp. 24. (No. 247, Division of Publications.) Seventh edition.

REPRINTS.

Repairs of Macadam Roads. By E. G. Harrison, C. E. Pp. 14. (Circular No. 30, Office of Road Inquiry.)

List of National, State and Local Road Associations and Kindred Organizations in the United States. By Martin Dodge, Director. Pp. 13. (Circular No. 36, Office of Public Road Inquiries.)

Soil Survey in Salt River Valley, Arizona. By Thomas H. Means. Pp. v, 287-332, pls. 4, figs. 8. (Reprinted from the Report on Field Operations of the Division of Soils for 1900.)

FARMERS' BULLETINS.

Winter Forage Crops for the South. By Carleton R. Ball, Assistant Agrostologist, Grass and Forage Plant Investigations, Bureau of Plant Industry. Pp. 36, figs. 24. (Farmers' Bulletin No. 147.)

Descriptions of grasses and legumes suitable for winter forage and pasture in the Southern States.

REPRINTS.

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)

Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)

Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)

Marketing Farm Produce. By George G. Hill, formerly Manager and Editor of the American Farmer, Illinois. Pp. 28, figs. 7. (Farmers' Bulletin No. 62.)

Experiment Station Work—V. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 78.)

Raising Sheep for Mutton. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)

Sheep, Hogs, and Horses in the Pacific Northwest: I. Sheep Husbandry, by James Withycombe, V. S., Vice Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III. The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

The Apple and How to Grow It. By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)

Practical Suggestions for Farm Buildings. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)

Experiment Station Work—XVIII. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 14. (Farmers' Bulletin No. 133.)

Tree Planting on Rural School Grounds. By Wm. L. Hall, Assistant Superintendent of Tree Planting, Bureau of Forestry. Pp. 32, figs. 17. (Farmers' Bulletin No. 134.)

Earth Roads. By Maurice O. Eldridge, Assistant Director, Public Road Inquiries. Pp. 24, figs. 20. (Farmers' Bulletin No. 136.)

The Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 48, figs. 7. (Farmers' Bulletin No. 137.)

Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 131.)

Principles of Nutrition and Nutritive Value of Food. By W. O. Atwater, Ph. D., Special Agent in Charge of Nutrition Investigations, Office of Experiment Stations. Prepared under the supervision of the Office of Experiment Stations, A. C. True, Director. Pp. 48, charts 2. (Farmers' Bulletin No. 142.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 2, for the month of February, 1901.)

Snow and Ice Bulletins for Tuesdays, March 4, 11, 18, and 25. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau Stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

(Reprinted from Bulletin No. 100, Office of Experiment Stations, U. S. Department of Agriculture. Report of Irrigation Investigations in California.)

The Irrigation Problems of Honey Lake Basin, California. By William E. Smythe, Vice-President of the California Water and Forest Association. Pp. iii, 71-113, pl. 1.

Irrigation from the San Joaquin River. By Frank Soulé, Professor of Civil Engineering in the University of California. Pp. iii, 215-258, pls. 3.

Water Appropriation from Kings River. By C. E. Grunsky, C. E., City Engineer of San Francisco. Pp. iii, 259-325, pls. 4, figs. 5.

A Study of Water Rights on the Los Angeles River, California. By Edward M. Boggs, C. E., Consulting Engineer. Pp. iii, 327-351.

Report of the Statistician for 1901. By John Hyde. Pp. 341-344. (Reprinted from Annual Reports, U. S. Department of Agriculture, for 1901.)

GEO. WM. HILL,
Editor and Chief.

Approved:

JAMES WILSON,
Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *April 30, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[April, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

American Breeds of Beef Cattle, with Remarks on Pedigrees. By George M. Rommel, B. S. A., Expert in Animal Husbandry, Bureau of Animal Industry. Pp. 34, pls. 23. (Bulletin No. 34, Bureau of Animal Industry.) Price 15 cents.

Eleven Miscellaneous Papers on Animal Parasites. Pp. 61, pls. 5, figs. 38. (Bulletin No. 35, Bureau of Animal Industry.) Price 10 cents.

Foods and Food Adulterants.—Preserved Meats. Investigations made under Direction of H. W. Wiley, Chief of the Bureau of Chemistry, by W. D. Bigelow, with the collaboration of Edward Mackay Chace, L. S. Munson, L. M. Tolman, and others. Pp. ix, 1375–1517, figs. 3. (Bulletin No. 13, Part 10, Bureau of Chemistry.) Price 10 cents.

Insect Enemies of the Pine in the Black Hills Forest Reserve. An Account of Results of Special Investigations, with Recommendations for Preventing Losses. Prepared under the direction of the Entomologist. By A. D. Hopkins, Ph. D., Vice-Director and Entomologist of the West Virginia Agricultural Experiment Station. Pp. 24, pls. 7, figs. 5. (Bulletin No. 32, new series, Division of Entomology.) Price 10 cents.

The Evolution of Reaping Machines. By Merritt Finley Miller, Bachelor of Science in Agriculture of Ohio State University. Pp. 43, pls. 9, fig. 1. (Bulletin No. 103, Office of Experiment Stations.) Price 10 cents.

A summarized history of the various stages in the development of reaping machines, showing the important advances made in developing the perfected modern machine.

Results of Investigations on the Rothamsted Soils, Being the Lectures Delivered under the Provisions of the Lawes Agricultural Trust, by Bernard Dyer, D. Sc. (Lond.) F. I. C., F. C. S., F. L. S., Before the Association of American Agricultural Colleges and Experiment Stations at New Haven and Middletown, Conn., in November, 1900. Pp. 180. (Bulletin No. 106, Office of Experiment Stations.) Price 10 cents.

Experiments on the Metabolism of Matter and Energy in the Human Body, 1898–1900. By W. O. Atwater, Ph. D., and F. G. Benedict, Ph. D., with the cooperation of A. P. Bryant, M. S., A. W. Smith, M. S., and J. F. Snell, Ph. D. Pp. 147. (Bulletin No. 109, Office of Experiment Stations.) Price 10 cents.

Experiment Station Record. Vol. XIII, No. 7. E. W. Allen, Ph. D., Editor. Pp. ix, 605-704, pl. 1. Price 10 cents.

Experiment Station Record. Vol. XIII, No. 8. E. W. Allen, Ph. D., Editor. Pp. ix, 705-806, figs. 2. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Our Foreign Trade in Agricultural Products, 1892-1901. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 67. (Bulletin No. 27, Section of Foreign Markets.) Price 5 cents.

A statistical review of the foreign trade of the United States in agricultural products during the ten fiscal year 1892-1901.

The Algerian Durum Wheats: A Classified List, with Descriptions. By Carl S. Scofield, Expert, Botanical Investigations and Experiments. Pp. 48, pls. 18. (Bulletin No. 7, Bureau of Plant Industry.) Price 15 cents.

Experiments in Range Improvement in Central Texas. By H. L. Bentley, Special Agent, Grass and Forage Plant Investigations. Pp. 72, pls. 2, figs. 6. (Bulletin No. 13, Bureau of Plant Industry.) Price 10 cents.

Results of experiments at Abilene, Tex., showing the practicability of reclaiming the worn-out ranges in central Texas within a reasonable time and expense.

Forage Conditions on the Northern Border of the Great Basin, Being a Report upon Investigations Made During July and August, 1901, in the Region Between Winnemucca, Nev., and Ontario, Oreg. By David Griffiths, Expert in Charge of Field Management, Grass and Forage Plant Investigations. Pp. 60, frontispiece, pls. 16. (Bulletin No. 15, Bureau of Plant Industry.) Price 15 cents.

Results of an investigation of the range conditions in northern Nevada and southern Oregon, made for the purpose of determining the condition of the forage supply and ascertaining, if possible, some method of treatment of the range and pasture lands which would tend to increase the efficiency of the pasture and hay meadows.

Some Diseases of the Cowpea: I. The Wilt Disease of the Cowpea and Its Control. By W. A. Orton, Assistant Pathologist. II. A Cowpea Resistant to Root Knot (*Heterodera radicicola*). By Herbert J. Webber, Physiologist, and W. A. Orton, Assistant Pathologist. Pp. 38, pls. 6, fig. 1. (Bulletin No. 17, Bureau of Plant Industry.) Price 10 cents.

Kentucky Bluegrass Seed: Harvesting, Curing, and Cleaning. By A. J. Pieters, Botanist in Charge of Seed Laboratory, and Edgar Brown, Assistant Botanist, Botanical Investigations and Experiments. Pp. 19, pls. 6, figs. 3. (Bulletin No. 19, Bureau of Plant Industry.) Price 10 cents.

Growing Sumatra Tobacco Under Shade in the Connecticut Valley. By Milton Whitney. Pp. 31, pls. 7, figs. 2. (Bulletin No. 20, Bureau of Soils.) Price 10 cents.

A detailed statement relating to experiments in growing Sumatra tobacco under shade in the Connecticut Valley. Conducted under immediate supervision of a tobacco expert of the Bureau of Soils.

Crop Reporter. Vol. 3, No. 12. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1902. By Henry E. Alvord, Chief of Dairy Division. Pp. 8. (Circular No. 36, Bureau of Animal Industry.)

Directory of State Officials and Organizations Concerned with the Protection of Birds and Game, 1902. By T. S. Palmer, Assistant Chief, Biological Survey. Pp. 10. (Circular No. 35, Division of Biological Survey.)

Proposed Reforms in Fertilizer Inspection Laws. By H. W. Wiley. Pp. 4. (Circular No. 3, Bureau of Chemistry, second revised edition.)

Amended Methods Adopted at the Eighteenth Annual Convention of the Associations of Official Agricultural Chemists. By William H. Krug, Referee on Foods and Feeding Stuffs for 1901. Pp. 3. (Circular No. 7, Division of Chemistry, revised edition.)

Monthly List of Publications. March, 1902. Pp. 4. (No. 439, Division of Publications.)

REPRINTS.

Directions for the Use of Blackleg Vaccine. By Victor A. Nörsgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry.) Second revision.

Money Value of Good Roads to Farmers. By W. C. Latta, Purdue University, Lafayette, Ind. Pp. 4. (Circular No. 23, Office of Road Inquiry.)

Methods of Propagating the Orange and Other Citrus Fruits. By Herbert J. Webber, Assistant, Division of Vegetable Physiology and Pathology, U. S. Department of Agriculture. Pp. ii, 471-489, figs. 13. (Reprinted with revision from the Yearbook of the Department of Agriculture for 1896.)

FARMERS' BULLETINS.

Celery Culture. By W. R. Beattie, in Charge of Testing Gardens, Office of Botanical Investigations and Experiments. Pp. 32, figs. 7. (Farmers' Bulletin No. 148.)

Treats of the soil and its preparation for the production of celery, transplanting, watering, growing in open ground, mulching, cultivation, insect control, methods of blanching, storing, and marketing.

REPRINTS.

Barnyard Manure. By W. H. Beal, of the Office of Experiment Stations. Pp. 32, figs. 7. (Farmers' Bulletin No. 21.)

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 40. (Farmers' Bulletin No. 22.) Revised edition.

The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. [Reprinted, with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.] Pp. 24. (Farmers' Bulletin No. 55.)

- The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.)
- Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)
- Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted from the Report of the Bureau of Animal Industry for 1898.) Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)
- Experiment Station Work—XIX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 8. (Farmers' Bulletin No. 144.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

- Monthly Weather Review. Annual Summary for 1901. Vol. XXIX. Pp. ix, 591–613, charts 7. (W. B., No. 260.)
- Monthly Weather Review, January, 1902. Vol. XXX, No. 1. Pp. 58, charts 10. (W. B., No. 261.)

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 3, for the month of March, and Nos. 4, 5, and 6 for the month of April, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

(Reprinted from the Report on Field Operations of the Division of Soils for 1900.)

- A Soil Survey Around Lancaster, Pa. By Clarence W. Dorsey. Pp. iii, 61–84, pls. 4, figs. 2, map 1.
- Soil Survey of Montgomery County, Ohio. By Clarence W. Dorsey and George N. Coffey. Pp. ii, 85–102, pls. 3, figs. 4, map 1.
- Soil Survey of Cecil County, Md. By Clarence W. Dorsey and Jay A. Bonsteel. Pp. ii, 103–124, figs. 6, map 1.
- Soil Survey of St. Mary County, Md. By Jay A. Bonsteel. Pp. ii, 125–145, figs. 4, map 1.
- Soil Survey of Calvert County, Md. By Jay A. Bonsteel and R. T. Avon Burke. Pp. iii, 147–171, fig. 1, map 1.
- Soil Survey of Kent County, Md. By Jay A. Bonsteel. Pp. ii, 173–186, map 1.
- Soil Survey Around Santa Ana, Cal. By J. Garnett Holmes. Pp. iii, 385–412, pls. 8, figs. 2, maps 2.
- Report of the Statistician. By John Hyde. Pp. 293–297. (Reprinted from the Annual Reports of the Department of Agriculture for 1900.)

GEO. WM. HILL,
Editor and Chief.

Approved:
JAMES WILSON,
Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.
No. 441.

United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *May 31, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[May, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Index-Catalogue of Medical and Veterinary Zoology. Part I.
[Authors: A to Azevedo.] By Ch. Wardell Stiles, Ph. D., and
Albert Hassall, M. R. C. V. S. Pp. 46. (Bulletin No. 39,
Bureau of Animal Industry.) Price 5 cents.

Mexico as a Market for Purebred Beef Cattle from the United States.
By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry.
Pp. 28, map 1. (Bulletin No. 41, Bureau of Animal Industry.)
Price 10 cents.

Contains data relative to the importation of cattle into the Republic of Mexico, which may be useful to breeders of purebred cattle in the United States who may wish to find a market for their surplus animals.

Provisional Methods for the Analysis of Foods Adopted by the Association of Official Agricultural Chemists, November 14–16, 1901.
Edited by H. W. Wiley, Secretary, with the collaboration of W. D. Bigelow, Referee on Food Adulteration. Pp. 169, figs. 7. (Bulletin No. 65, Bureau of Chemistry.) Price 10 cents.

Organization Lists of the Agricultural Colleges and Experiment Stations in the United States, with a list of Agricultural Experiment Stations in Foreign Countries. Pp. 130. (Bulletin No. 111, Office of Experiment Stations.) Price 10 cents.

Annual Report of the Office of Experiment Stations for the Year Ended June 30, 1901. By A. C. True, Director. Pp. 489, pls. 41. (House Doc. No. 334, 57th Cong., 1st Sess.)

Progress of the Beet-Sugar Industry of the United States in 1901.
In two parts—Part I by Charles F. Saylor, Special Agent; Part II by C. O. Townsend and A. J. Pieters, of the Bureau of Plant Industry. Pp. 106, pls. 15, figs. 5. (Senate Doc. No. 316, 57th Cong., 1st Sess.)

Observations on the Mosaic Disease of Tobacco. By Albert F. Woods, Pathologist and Physiologist, Vegetable Pathological and Physiological Investigations. Pp. 24, pls. 6. (Bulletin No. 18, Bureau of Plant Industry.) Price 15 cents.

The Seeds of Rescue Grass and Chess. By F. H. Hillman, Assistant, Seed Laboratory, Botanical Investigations and Experiments. Pp. 4, figs. 3. (Bulletin No. 25, Bureau of Plant Industry, advance sheets.)

Capillary Studies and Filtration of Clay from Soil Solutions. By Lyman J. Briggs and Macy H. Lapham. Pp. 40, figs. 5. (Bulletin No. 19, Bureau of Soils.) Price 5 cents.

Report of the Appointment Clerk. By J. B. Bennett. Pp. 5. Report respecting the officers, employees, etc., constituting the organized working body of the United States Department of Agriculture as it existed on July 1, 1901. First and revised editions.

Crop Reporter. Vol. 4, No. 1. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

Preliminary Report on Argentina as a Market for Purebred Cattle from the United States. Pp. 4 (Circular No. 37, Bureau of Animal Industry.)

Importation of Reptiles into Hawaii. P. 1. (Circular No. 36, Biological Survey.)

Regulations in regard to the admission of reptiles into Hawaii.

How to Control the San Jose Scale. By C. L. Marlatt, First Assistant Entomologist. Pp. 6. (Circular No. 42, second series, revised, Division of Entomology.)

A New Nomenclature for the Broods of the Periodical Cicada. By C. L. Marlatt, First Assistant Entomologist. Pp. 8. (Circular No. 45, second series, Division of Entomology.)

Key to Subject Index of Experiment Stations Literature. Pp. 3. (Circular No. 23, Office of Experiment Stations, Revised edition.)

Agricultural Imports and Exports, 1897-1901. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 16. (Circular No. 24, Section of Foreign Markets.)

Monthly List of Publications. April, 1902. Pp. 4. (No. 440, Division of Publications.)

REPRINTS.

Cultivation of Cigar-Leaf Tobacco in Florida. By Marcus L. Floyd, of the Division of Soils, in cooperation with the Division of Vegetable Physiology and Pathology. Pp. 31, pls. 8, figs. 6. (Report No. 62.) Price 10 cents.

American Ginseng: Its Commercial History, Protection, and Cultivation. By George V. Nash. Revised and extended by Maurice G. Kains. Pp. 32, figs. 5. (Bulletin No. 16, Division of Botany, Revised edition.) Price 5 cents.

Timber: An Elementary Discussion of the Characteristics and Properties of Wood. By Filibert Roth, Special Agent in Charge of Timber Physics. Under the direction of B. E. Fernow, Chief of the Division of Forestry. Pp. 88, figs. 49. (Bulletin No. 10, Division of Forestry.) Price 10 cents.

Check List of the Forest Trees of the United States, Their Names and Ranges. By George B. Sudworth, Dendrologist of the Division of Forestry. Prepared under the direction of B. E. Fernow, Chief of the Division of Forestry. Pp. 144. (Bulletin No. 17, Division of Forestry.) Price 15 cents.

Macaroni Wheats. By Mark Alfred Carleton, Cerealist, Vegetable Pathological and Physiological Investigations. Pp. 62, pls. 11, figs. 2. (Bulletin No. 3, Bureau of Plant Industry.) Price 20 cents.

Proceedings of the International Good-Roads Congress, held at Buffalo, N. Y., September 16-21, 1901. Pp. 100. (Bulletin No. 21, Public Road Inquiries.) Price 5 cents.

Canker Worms. By D. W. Coquillett, Assistant, Division of Entomology. Pp. 4, figs. 4. (Circular No. 9, second series, Division of Entomology.)

Report of the Statistician for 1901. By John Hyde. Pp. 341-344. (Reprinted from Annual Reports of the Department of Agriculture for 1901.)

FARMERS' BULLETINS.

Experiment Station Work—XX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 149.)

Contents: Muck or peat—Culture of potatoes—The farmer's vegetable garden—Shrinkage of farm products—Muskmelons—Soils for Strawberries—Fertilizers for strawberries—Plum culture—Onion culture—Digestibility of milk—Shelter for dairy cows—Feed mills and windmills.

Clearing New Land. By Franklin Williams, jr., Farmer and Horticulturist, Fairfax County, Va. Pp. 24, figs. 7. (Farmers' Bulletin No. 150.)

Suggestions for clearing new land in the middle and southern States, methods of clearing, cost of clearing, and methods to be used. Also description of the root systems of different species of trees, cultivation, and crops adapted to new land.

REPRINTS.

Alfalfa, or Lucern. By Jared G. Smith, Assistant Agrostologist. Pp. 24, figs. 3. (Farmers' Bulletin No. 31.)

Sheep Feeding. By John A. Craig, Professor of Animal Husbandry in the University of Wisconsin. [Under the supervision of the Office of Experiment Stations.] Pp. 24. (Farmers' Bulletin No. 49.)

Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)

Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S., Assistant Ornithologist, Biological Survey. Pp. 40, figs. 22. (Farmers' Bulletin No. 54.)

Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under supervision of the Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)

- Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)
- Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)
- Meadows and Pastures: Formation and Cultivation in the Middle Eastern States. By Jared G. Smith, Assistant Agrostologist. Pp. 28, figs. 9. (Farmers' Bulletin No. 66.) Revised edition.
- Tomato Growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)
- Corn Culture in the South. By S. M. Tracy, M. S. Pp. 24. (Farmers' Bulletin No. 81.)
- The Farmer's Interest in Good Seed. By A. J. Pieters, In charge of Pure Seed Investigations, Division of Botany. Pp. 24, figs. 7. (Farmers' Bulletin No. 111.)
- Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)
- Experiment Station Work—XVI. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 122.)
- Red Clover Seed: Information for Purchasers. By A. J. Pieters, Assistant Botanist, Division of Botany, In charge of Pure Seed Investigations. Pp. 11, figs. 2. (Farmers' Bulletin No. 123.)
- Practical Suggestions for Farm Buildings. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)
- Important Insecticides: Directions for Their Preparation and Use. (A revision of Farmers' Bulletin No. 19.) By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 42, figs. 6. (Farmers' Bulletin No. 127.)
- Eggs and Their Uses as Food. By C. F. Langworthy, Ph. D. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32. (Farmers' Bulletin No. 128.)
- Household Tests for the Detection of Oleomargarine and Renovated Butter. By G. E. Patrick, Assistant in the Division of Chemistry. Pp. 11. (Farmers' Bulletin No. 131.)
- Sorghum Sirup Manufacture. By A. A. Denton, Medicine Lodge, Kans. Pp. 40, figs. 26. (Farmers' Bulletin No. 135.)
- Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 141.)

Principles of Nutrition and Nutritive Value of Food. By W. O. Atwater, Ph. D., Special Agent in charge of Nutrition Investigations, Office of Experiment Stations. Prepared under the supervision of the Office of Experiment Stations, A. C. True, Director. Pp. 48, charts 2. (Farmers' Bulletin No. 142.) Revised edition.

Conformation of Beef and Dairy Cattle. By Andrew M. Soule, Professor of Agriculture, and Vice-Director of Tennessee Agricultural Experiment Station. Pp. 44, figs. 44. (Farmers' Bulletin No. 143.)

REPRINTED FROM THE YEARBOOK OF THE DEPARTMENT OF
AGRICULTURE FOR 1901.

The Purpose of a Soil Survey. By Milton Whitney, Chief of the Bureau of Soils. Pp. iii, 117-132.

Some Problems of the Rural Common School. By A. C. True, Ph. D., Director of the Office of Experiment Stations. Pp. ii, 133-154, pl. 1, figs. 4.

Insects as Carriers and Spreaders of Disease. By L. O. Howard, Ph. D., Entomologist. Pp. ii, 177-192, figs. 16.

The Future Demand for American Cotton. By J. L. Watkins, Cotton Expert, Division of Statistics. Pp. ii, 193-206.

Mohair and Mohair Manufactures. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. ii, 271-284, pls. 2, fig. 1.

The Cotton Seed Industry. By Charles M. Daugherty, of the Division of Statistics. Pp. ii, 285-298.

Influence of Environment on the Chemical Composition of Plants. By Dr. H. W. Wiley, Chief of the Bureau of Chemistry. Pp. ii, 299-318, figs. 3.

The Present Status of the Mexican Cotton-Boll Weevil in the United States. By W. D. Hunter, Special Agent, Division of Entomology. Pp. ii, 369-380, fig. 1.

Dietaries in Public Institutions. By W. O. Atwater, Ph. D., Special Agent in Charge of Nutrition Investigations, Office of Experiment Stations. Pp. ii, 393-408.

Experimental Work with Fungous Diseases of Grasshoppers. By L. O. Howard, Ph. D., Entomologist. Pp. iv, 459-470, figs. 3.

Floods and Flood Warnings. By H. C. Frankenfield, Forecast Official, Weather Bureau. Pp. ii, 477-486.

Agricultural Investigations in the Island Possessions of the United States. By Walter H. Evans, Ph. D., of the Office of Experiment Stations. Pp. ii, 503-526.

The Chinook Winds. By Alvin T. Burrows, Observer, Weather Bureau. Pp. iii, 555-566, figs. 3.

The Tuberculin Test for Tuberculosis. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. iii, 581-592.

Forest Extension in the Middle West. By William L. Hall, Assistant Superintendent of Tree Planting, Division of Forestry. Pp. 145-156, pls. 4. (Reprinted from Yearbook of the Department of Agriculture for 1900.)

REPRINTED FROM THE REPORT ON FIELD OPERATIONS OF THE
DIVISION OF SOILS FOR 1900.

Soil Survey Around Fresno, Cal. By Thomas H. Means and J. Garnett Holmes. Pp. iv, 333-384, pls. 16, figs. 8, maps 2.

Soil Survey in Weber County, Utah. By Frank D. Gardner and Charles A. Jensen. Pp. iii, 207-242, pl. 1, maps 3.

Soil Survey in the Sevier Valley, Utah. By Frank D. Gardner and Charles A. Jensen. Pp. iv, 243-285, pls. 7, figs. 7, maps 4.

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Wind Velocity and Fluctuations of Water Level on Lake Erie. Prepared under direction of Willis L. Moore, Chief, U. S. Weather Bureau. By Alfred J. Henry, Professor of Meteorology. Pp. 22, charts 13. (W. B. No. 262.) Price 50 cents.

Monthly Weather Review, February, 1902. Vol. XXX, No. 2. Pp. 108, charts 10. (W. B., No. 263.) Price 20 cents.

Meteorological Chart of the Great Lakes. By Alfred J. Henry and Norman B. Conger. Prepared under direction of Willis L. Moore, Chief, U. S. Weather Bureau. Pp. 26, map 1. (W. B. No. 264) Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902), reporting temperature and rainfall, with reference to their effect on crops. (Nos. 7, 8, 9, and 10 for the month of May, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

GEO. WM. HILL,
Editor and Chief.

Approved:
JAMES WILSON,
Secretary of Agriculture.

NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, of the Bureau of Animal Industry, of the Bureau of Soils, and of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

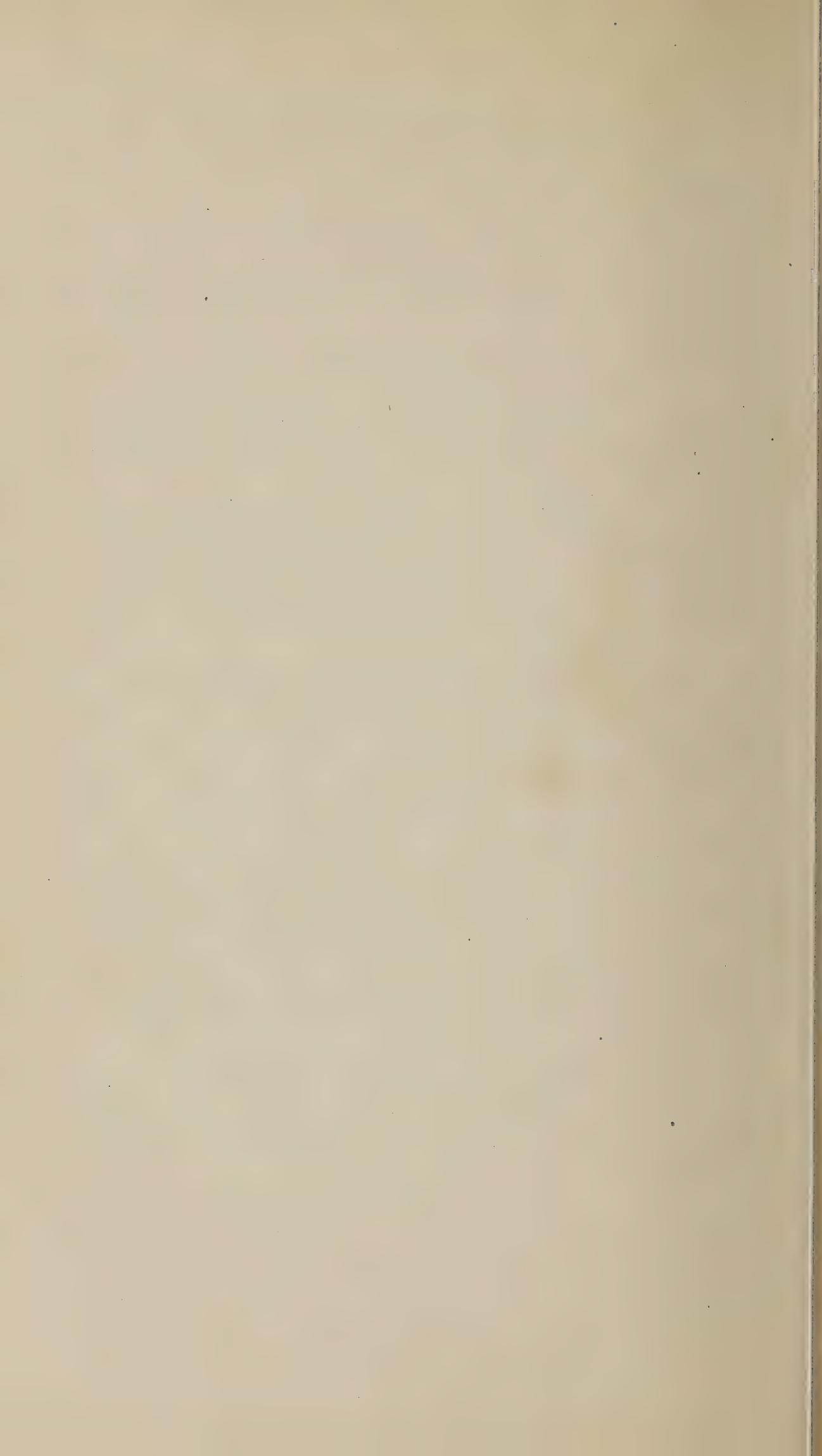
The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.



This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *June 30, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[June, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Yearbook of the U. S. Department of Agriculture, 1901. Pp. 846, frontispiece, pls. 90, figs. 52.

This volume is in three parts, the first part, in accordance with law, being devoted to the annual report of the Secretary of Agriculture.

The second part comprises thirty-three miscellaneous articles on agricultural and kindred subjects, and is thoroughly representative of the varied scientific work conducted by the Department.

The third part is the appendix. This contains the directory of the Department, the directory of the agricultural colleges and experiment stations, lists of State officials in charge of agriculture, secretaries of State agricultural societies, officials in charge of farmers' institutes, State dairy officials, dairy associations, State veterinarians and secretaries of sanitary boards, officers of horticultural and kindred associations, national, sectional, and State beekeepers' associations, miscellaneous State organizations, statistics of the principal crops, farm animals and their products, transportation rates, and other information of interest to the farmer.

The small quota (only 6 per cent) of this publication assigned to this Department is insufficient to supply even its regular correspondents and coworkers, and miscellaneous applicants are therefore respectfully referred to their Senators, Representatives, and Delegates in Congress, to whom the other 94 per cent is allotted for distribution. The Superintendent of Documents has them for sale at 80 cents per copy.

Emergency Report on Surra. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry, and Ch. Wardell Stiles, Ph. D., Pathologist of Bureau of Animal Industry. With a Bibliography of Surra and Allied Trypanosomatic Diseases. By Albert Hassall, M. R. C. V. S., Acting Assistant Zoologist of Bureau of Animal Industry. Pp. 152, pls. 16, figs. 112. (Bulletin No. 42, Bureau of Animal Industry.) Price 15 cents.

Description of a horse disease, now existing in the Philippines, caused by a microscopic parasite which lives in the blood, and methods of treatment.

Some Insects Injurious to Vegetable Crops. A Series of Articles Dealing with Insects of this Class. Prepared under the direction of the Entomologist. By F. H. Chittenden, Assistant Entomologist. Pp. 117, figs. 30. (Bulletin No. 33, new series, Division of Entomology.) Price 10 cents.

A continuation of work begun several years ago. It is the third bulletin of the series and discusses various species of noxious insects which were destructive during the years 1900 and 1901; also a few which came under observation at an earlier date.

Principal Insects Liable to be Distributed on Nursery Stock. Prepared under the direction of the Entomologist, by Nathan Banks, Assistant Entomologist. Pp. 46, figs. 43. (Bulletin No. 34, new series, Division of Entomology.) Price 5 cents.

Descriptive catalogue of the insects liable to be transported upon nursery stock; also notes upon the species affecting fruits.

Statistics of the Land-Grant Colleges and Agricultural Experiment Stations in the United States for the Year ended June 30, 1901. Pp. 39. (Bulletin No. 114, Office of Experiment Stations.) Price 5 cents.

Suggestions to Pioneer Farmers in Alaska. By C. C. Georgeson, under the supervision of Office of Experiment Stations. Pp. 15, pls. 7. (Bulletin No. 1, Alaska Agricultural Experiment Stations.) Price 5 cents.

A Working Plan for Forest Lands Near Pine Bluff, Arkansas. By Frederick E. Olmsted, Field Assistant, Bureau of Forestry. Pp. 48, frontispiece, pls. 9, figs. 9. (Bulletin No. 32, Bureau of Forestry.) Price 15 cents.

Accessions to the Department Library. January-March, 1902. Pp. 67. (Library Bulletin No. 40.) Price 5 cents.

Stock Ranges of Northwestern California: Notes on the Grasses and Forage Plants and Range Conditions. By Joseph Burt Davy, Assistant Botanist, Agricultural Experiment Station, University of California. Prepared under the direction of the Agrostologist, Grass and Forage Plant Investigations. Pp. 81, pls. 8, maps 3, figs. 4. (Bulletin No. 12, Bureau of Plant Industry.) Price 15 cents.

A Preliminary Study of the Germination of the Spores of *Agaricus Campestris* and Other Basidiomycetous Fungi. By Margaret C. Ferguson, Cooperating with Vegetable Pathological and Physiological Investigations. Pp. 43, pls. 3. (Bulletin No. 16, Bureau of Plant Industry.) Price 10 cents.

A technical paper showing results of experiments in growing spawn for the production of mushrooms.

Crop Reporter, Vol. 4, No. 2. Published by the U. S. Department of Agriculture under the supervision of the Statistician.

A three-column quarto publication devoted to agricultural topics.

Regulations for the Importation of Eggs of Game Birds for Propagation. Pp. 2. (Circular No. 37, Biological Survey.)

Hydrocyanic-Acid Gas Against Household Insects. By L. O. Howard, Entomologist. Pp. 4. (Circular No. 46, second series, Division of Entomology.)

Results of experiments with hydrocyanic-acid gas for the destruction of household insects and methods of using it.

The Bedbug (*Cimex lectularius* Linn.). By C. L. Marlatt, First Assistant Entomologist. Pp. 8, figs. 3. (Circular No. 47, second series, Division of Entomology.)

History and habits of this well-known insect, with remedies.

The Silver Fish (*Lepisma saccharina* Linn.). By C. L. Marlatt, First Assistant Entomologist. Pp. 4, figs. 2. (Circular No. 49, second series, Division of Entomology.)

Description of a troublesome enemy of books, papers, card labels in museums, and starched clothing, and remedies.

REPRINTS.

General Index to the Seven Volumes of Insect Life, 1888-1895. Pp. 145. (Division of Entomology.) Price 5 cents.

Irrigation Laws of the Northwest Territories of Canada and of Wyoming, with Discussions by J. S. Dennis, Deputy Commissioner of Public Works, Canada, and Fred Bond, State Engineer of Wyoming, and J. M. Wilson, Agent and Expert, Irrigation Investigations, Office of Experiment Stations. Pp. 90, frontispiece, pls. 5. (Bulletin No. 96, Office of Experiment Stations.) Price 10 cents.

Forest Influences. By B. E. Fernow and M. W. Harrington, Division of Forestry. Pp. 197, figs. 63. (Bulletin No. 7, Forestry Division.) Price 15 cents.

Economical Designing of Timber Trestle Bridges. By A. L. Johnson, C. E. Prepared under the direction of B. E. Fernow, Chief of Division of Forestry. Pp. 57, figs. 7. (Bulletin No. 12, Division of Forestry.) Price 5 cents.

Seeds and Plants Imported Through the Section of Seed and Plant Introduction for Distribution in Cooperation with the Agricultural Experiment Stations. Inventory No. 9. Numbers 4351-5500. Pp. 79. (Bulletin No. 5, Bureau of Plant Industry.) Price 10 cents.

Earth Roads: Hints on their Construction and Repair. Compiled by Roy Stone, Special Agent in Charge of Road Inquiry. Pp. 20, figs. 11. (Bulletin No. 8, Office of Road Inquiry.) Price 5 cents.

State Aid to Road Building in New Jersey. By Edward Burrough, Chairman of the New Jersey State Board of Agriculture and State Commissioner of Public Roads. Pp. 20. (Bulletin No. 9, Office of Road Inquiry.) Price 5 cents.

Wide Tires. Laws of Certain States Relating to Their Use, and Other Pertinent Information. Compiled by Roy Stone, Special Agent in Charge of Road Inquiry. Pp. 16. (Bulletin No. 12, Office of Road Inquiry.) Price 5 cents.

Notes on the Employment of Convicts in Connection with Road Building. Compiled by Roy Stone, Director. Pp. 21, figs. 4. (Bulletin No. 16, revised, Office of Road Inquiry.) Price 5 cents.

The Bermuda Lily Disease: A preliminary Report of Investigations. By Albert F. Woods, Assistant Chief, Division of Vegetable Physiology and Pathology. Pp. 15, figs. 4. (Bulletin No. 14, Division of Vegetable Physiology and Pathology.) Price 5 cents.

The Cultural Characters of *Pseudomonas hyacinthi*, *Ps. campestris*, *Ps. phaseoli*, and *Ps. stewarti*—Four One-Flagellate Yellow Bacteria Parasitic on Plants. By Erwin F. Smith, Pathologist, in charge of Laboratory of Plant Pathology. Pp. 153. (Bulletin No. 28, Division of Vegetable Physiology and Pathology.) Price 10 cents.

- Blackleg: Its Nature, Cause, and Prevention. By Victor A. Nörsgaard, Chief of Pathological Division. Pp. 23, figs. 1. (Circular No. 31, Bureau of Animal Industry.)
- Protection and Importation of Birds Under Act of Congress Approved May 25, 1900. Pp. 6. (Biological Survey Circular No. 29.)
- Suggestions to Prospective Forest Students. By Gifford Pinchot, Forester. Pp. 5. (Circular No. 23, Bureau of Forestry.)
- Money Value of Good Roads to Farmers. By Roy Stone, Special Agent and Engineer. Pp. 4. (Circular No. 23, Office of Road Inquiry.)
- Going in Debt for Good Roads. [Address delivered by Judge Thayer, of Clinton, before the Iowa Bankers' Association at their annual meeting in Council Bluffs, May 24, 1893.] Pp. 5. (Circular No. 26, Office of Road Inquiry.)
- Cost of Hauling Farm Products to Market or to Shipping Points in European Countries. By Roy Stone, Director of Road Inquiry. Pp. 12. (Circular No. 27, Office of Road Inquiry.)
- Crop Reporter, Vol. 1, No. 1. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 4.
- Crop Reporter, Vol. 4, No. 1. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 8.
- Cattle Ticks (*Ixodoidea*) of the United States. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry, and Ch. Wardell Stiles, Ph. D., Zoologist of Bureau of Animal Industry. Pp. iii, 380-491, pls. 25, figs. 98. [Reprinted from the Seventeenth Annual Report of the Bureau of Animal Industry (1900).]
- Foreign Experiment Stations. Pp. 85-115. [Reprint from Bulletin No. 111, Office of Experiment Stations, U. S. Department of Agriculture.]
- Organization Lists of the Agricultural Colleges and Experiment Stations in the United States. March, 1902. Pp. 100. [Reprint from Bulletin No. 111, Office of Experiment Stations, U. S. Department of Agriculture.]
- Report of Irrigation Investigations for 1900. No. 1. Review of the Work. By Elwood Mead, Irrigation Expert in Charge. Discussion of Investigations. By C. T. Johnston, Assistant in Irrigation Investigations. Pp. 59, pls. 3, figs. 10. (Reprint from U. S. Department of Agriculture, Office of Experiment Stations, Bulletin No. 104.)
- Report of Irrigation Investigations for 1900. No. 2. Irrigation on Pecos River and Its Tributaries. By W. M. Reed, Special Agent. Irrigation in the Salt River Valley. By W. H. Code, Special Agent. Duty of Water Under the Gage Canal, Riverside, Cal., 1900. By W. Irving, C. E. Pp. v, 61-146, pls. 5, figs. 7. (Reprint from U. S. Department of Agriculture, Office of Experiment Stations, Bulletin No. 104.)

Report of Irrigation Investigations for 1900, No. 3. Irrigation Investigations in Nevada. By J. M. Wilson, Agent and Expert. Water Administration in Utah. By Special Agent R. C. Gemmell, State Engineer of Utah. Irrigation under Canals from Logan River. By George L. Swendsen, Professor of Irrigation Engineering, Utah Agricultural College. Irrigation under the Great Eastern Canal, Platte County, Nebr., 1900. By O. V. P. Stout, Professor of Civil Engineering, University of Nebraska. Use of Water in Irrigation at Wheatland, Wyo. By C. T. Johnson, Assistant in Irrigation Investigations. Duty of Water in Idaho. By D. W. Ross, State Engineer. Pp. v, 147-239, pls. 8, figs. 9. [Reprint from U. S. Department of Agriculture, Office of Experiment Stations, Bulletin 104.]

Report of Irrigation Investigations for 1900. No. 4. Use of Water in Irrigation in the Yakima Valley. By O. L. Waller, Professor of Mathematics and Civil Engineering, Washington Agricultural College and School of Science. Irrigation Investigations in Montana, 1900. By Samuel Fortier, C. E., Professor of Irrigation Engineering, Montana College of Agriculture and Mechanic Arts. Progress Report on Silt Measurements. By J. C. Nagle, C. E. Pp. v, 241-324, pls. 9, figs. 3. (Reprint from U. S. Department of Agriculture, Office of Experiment Stations, Bulletin No. 104.)

Forest Extension in the Middle West. By William L. Hall, Assistant Superintendent of Tree Planting, Division of Forestry. Pp. 145-156, pls. 4. (Reprint from Yearbook of Department of Agriculture for 1900.)

Office of Road Inquiry. By Roy Stone, Director of Office of Road Inquiry. Object-Lesson Roads. By Roy Stone, Director of Office of Road Inquiry. Pp. i, 175-382, pls. 2, fig. 1. (Reprint from Yearbook of Department of Agriculture for 1897.)

REPRINTED FROM THE YEARBOOK OF THE DEPARTMENT OF
AGRICULTURE FOR 1901.

The Relation of Nutrition to the Health of Plants. By Alfred F. Woods, Pathologist and Physiologist, Bureau of Plant Industry. Pp. ii, 155-176, pls. 7.

The Timber Resources of Nebraska. By William L. Hall, Superintendent of Tree Planting, Bureau of Forestry. Pp. ii, 207-216, pls. 6.

Progress in Plant and Animal Breeding. By Willet M. Hayes, M. Agr., Agriculturist, Minnesota Agricultural Experiment Station. Pp. ii, 217-232, pls. 3, fig. 1.

Agricultural Seeds: Where Grown and How Handled. By A. J. Pieters, Botanist in Charge of Seed Laboratory, Bureau of Plant Industry. Pp. iv, 233-256, pls. 4, figs. 2.

Road Building with Convict Labor in the Southern States. By J. A. Holmes, Special Agent in Office of Public Road Inquiries for Southern Division. Pp. ii, 319-332, pls. 5.

Grazing in the Forest Reserves. By Filibert Roth, Chief of the Forestry Division of the General Land Office, Department of the Interior. Pp. ii, 333-348, pls. 8.

Agriculture in the Tropical Islands of the United States. By O. F. Cook, Botanist in Charge of Investigations in Tropical Agriculture, Bureau of Plant Industry. Pp. iv, 349-368, pls. 6.

Government Cooperation in Object-Lesson Road Work. By Martin Dodge, Director of the Office of Public Road Inquiries. Pp. ii, 409-414, pls. 2.

Some Typical Reservoirs in the Rocky Mountain States. By Elwood Mead, Irrigation Expert, in charge of Irrigation Investigations, Office of Experiment Stations. Pp. iv, 415-430, pls. 8.

The Home Fruit Garden. By L. C. Corbett, Horticulturist, Bureau of Plant Industry. Pp. ii, 431-446, figs. 6.

Two Vanishing Game Birds: The Woodcock and the Wood Duck. By A. K. Fisher, Ornithologist, Biological Survey. Pp. iv, 447-458, pls. 2, figs. 3.

Commercial Apple Orchardring. By G. B. Brackett, Pomologist, Bureau of Plant Industry, Pp. ii, 593-608, pls. 4.

FARMERS' BULLETINS.

Dairying in the South. By S. M. Tracy, M. S., Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 48, figs. 4. (Farmers' Bulletin No. 151).

Gives some information in regard to the formation, management, and feeding of the dairy herd, the handling of its products, and suggests some practical details necessary to the best success of the dairy.

Scabies in Cattle. By Richard W. Hickman, V. M. D., Chief of Miscellaneous Division, Bureau of Animal Industry. Pp. 24, figs. 16. (Farmers' Bulletin No. 152.)

Description of a cattle disease known by various names, together with methods of treatment.

Orchard Enemies in the Pacific Northwest. By C. V. Piper, State Agricultural College, Pullman, Wash. Pp. 39, fig. 1. (Farmers' Bulletin No. 153.)

Descriptions of insects and diseases which damage orchard fruits, and remedies therefor.

The Home Fruit Garden: Preparation and Care. By L. C. Corbett, Horticulturist, Bureau of Plant Industry. Pp. 20, figs. 6. (Farmers' Bulletin No. 54.)

Suggestions in relation to the laying out and care of a small fruit garden, including cultivation, soil, planting, pruning, and protection.

How Insects Affect Health in Rural Districts. By L. O. Howard, Entomologist. Pp. 20, figs. 16. (Farmers' Bulletin No. 155.)

Treats of malaria and typhoid fever; how they are carried by insects, and methods of protection from these diseases.

REPRINTS.

Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)

- Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. (Farmers' Bulletin No. 42.)
- The Manuring of Cotton. (Condensed from an article by H. C. White, Ph. D., in Bulletin No. 33 of the Office of Experiment Stations.) Pp. 16. (Farmers' Bulletin No. 48.)
- Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)
- Bee Keeping. By Frank Benton, M. S., Assistant Entomologist. Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)
- Experiment Station Work—V. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 78.)
- Experiment Station Work—VII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 8. (Farmers' Bulletin No. 84.)
- Cowpeas. By Jared G. Smith, Assistant Agrostologist. Pp. 16, fig. 1. (Farmers' Bulletin No. 89.)
- Hog Raising in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40. (Farmers' Bulletin No. 100.)
- Farmers' Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)
- Beans, Peas, and Other Legumes as Food. By Mary Hinman Abel. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 10. (Farmers' Bulletin No. 121, revised edition.)
- Sweet Potatoes. By D. M. Nesbit. Pp. 40. (Farmers' Bulletin No. 129.)
- The Principal Insect Enemies of Growing Wheat. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 40, figs. 25. (Farmers' Bulletin No. 132.)
- Earth Roads. By Maurice O. Eldridge, Assistant Director, Public Road Inquiries. Pp. 24, figs. 20. (Farmers' Bulletin No. 136.)
- Irrigation in Field and Garden. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Agricultural Experiment Station. Pp. 40, figs. 18. (Farmers' Bulletin No. 138.)
- Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 141.)
- Carbon Bisulphid as an Insecticide. By W. E. Hinds, Temporary Assistant of the Division of Entomology. Pp. 28. (Farmers' Bulletin No. 145.)

Insecticides and Fungicides: Chemical Composition and Effectiveness of Certain Preparations. By J. K. Haywood, in Charge of Insecticide and Agricultural Water Laboratory, Bureau of Chemistry. Prepared under the direction of H. W. Wiley, Chief Chemist, cooperating with the Division of Entomology. Pp. 16. (Farmers' Bulletin No. 146.)

Celery Culture. By W. R. Beattie, in Charge of Testing Gardens, Office of Botanical Investigations and Experiments. Pp. 32, figs. 7. (Farmers' Bulletin No. 148.)

Experiment Station Work—XX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 149.)

Clearing New Land. By Franklin Williams, jr., Farmer and Horticulturist, Fairfax County, Va. Pp. 24, figs. 7. (Farmers' Bulletin No. 150.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. Vol. XXX, No. 3. March, 1902. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 109–156, charts 9. (W. B., No. 266.) Price 20 cents; \$2 per year.

Eclipse Meteorology and Allied Problems. Prepared under direction of Willis L. Moore, Chief of Weather Bureau, by Frank H. Bigelow, M. A., L. H. D., Professor of Meteorology. Pp. 166, charts 43. (W. B., No. 267.) Price 50 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902), reporting temperature and rainfall, with reference to their effect on crops. (Nos. 11, 12, 13, and 14 for the month of June, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATION NOT AVAILABLE.

Memorial Exercises in Honor of the Late John A. Myers. Pp. iii, 65–74. Frotispiece. [Reprinted from Bulletin No. 67, Bureau of Chemistry, U. S. Department of Agriculture.]

GEO. WM. HILL,
Editor and Chief.

Approved:
JAMES WILSON,
Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

N. 444.

United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., July 31, 1902.

MONTHLY LIST OF PUBLICATIONS.

[July, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Proceedings of the Eighteenth Annual Convention of the Association of Official Agricultural Chemists Held at Washington, D. C., November 14, 15, and 16, 1901. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 184, frontispiece. (Bulletin No. 67, Bureau of Chemistry.) Price 10 cents.

Agricultural Experiment Stations in Foreign Countries. By A. C. True and D. J. Crosby. Pp. 230. (Bulletin No. 112, Office of Experiment Stations.) Price 15 cents.

A report on the organization, origin, equipment, income, and lines of work of agricultural experiment stations in different countries.

Experiment Station Record. Vol. XIII, No. 9. E. W. Allen, Ph. D., Editor. Pp. viii, 807–906, figs. 2. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Crop Reporter, Vol. 4, No. 3. Published by the U. S. Department of Agriculture under the supervision of the Statistician.

A three-column quarto publication devoted to agricultural topics.

The House Centipede (*Scutigera forceps* Raf.). By C. L. Marlatt, First Assistant Entomologist. Pp. 4, figs. 2. (Circular No. 48, second series, Division of Entomology.)

The White Ant (*Termes flavipes* Koll.). By C. L. Marlatt, First Assistant Entomologist. Pp. 8, figs. 4. (Circular No. 50, second series, Division of Entomology.)

Cockroaches. By C. L. Marlatt, First Assistant Entomologist. Pp. 15, figs. 5. (Circular No. 51, second series, Division of Entomology.)

Monthly List of Publications, June, 1902. Pp. 8. (No. 442, Division of Publications.)

REPRINTS.

Contributions from The U. S. National Herbarium, Vol. VII, No. 3. Plants used by the Indians of Mendocino County, Cal. By V. K. Chesnut. Pp. vi, 295–408, vii, pls. 12, figs. 13. Price 15 cents.

Irrigation Laws of the Northwest Territories of Canada and of Wyoming, with Discussions by J. S. Dennis, Deputy Commissioner of Public Works, Canada, and Fred Bond, State Engineer of Wyoming, and J. M. Wilson, Agent and Expert, Irrigation Investigations, Office of Experiment Stations. Pp. 90, frontispiece, pls. 5. (Bulletin No. 96, Office of Experiment Stations.) Price 10 cents.

Results of Investigations on the Rothamsted Soils, Being the Lectures Delivered Under the Provisions of The Lawes Agricultural Trust by Bernard Dyer, D. Sc. (Lond.), F. I. C., F. C. S., F. L. S., Before the Association of American Agricultural Colleges and Experiment Stations, at New Haven and Middletown, Conn., in November, 1900. Pp. 180. (Bulletin No. 106, Office of Experiment Stations.) Price 10 cents.

Agricultural Exports of the United States, by Countries, 1895-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 88. (Bulletin No. 20, Section of Foreign Markets.) Price 10 cents.

Agricultural Imports of the United States, by Countries, 1895-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 74. (Bulletin No. 21, Section of Foreign Markets.) Price 5 cents.

Our Trade with Scandinavia, 1890-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 124. (Bulletin No. 22, Section of Foreign Markets.) Price 10 cents.

Our Foreign Trade in Agricultural Products, 1891-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 61. (Bulletin No. 23, Section of Foreign Markets.) Price 5 cents.

Sources of the Agricultural Imports of the United States, 1896-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 120. (Bulletin No. 24, Section of Foreign Markets.) Price 10 cents.

Distribution of the Agricultural Exports of the United States, 1896-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 182. (Bulletin No. 25, Section of Foreign Markets.) Price 10 cents.

Timber Physics, Part I. Preliminary Report. 1. Need of the Investigation. 2. Scope and Historical Development of the Science of "Timber Physics." 3. Organization and Methods of the Timber Examinations in the Division of Forestry. Compiled by B. E. Fernow, Chief of Forestry Division. Pp. iii, 1-57, pls. 6, figs. 10. (Bulletin No. 6, Forestry Division.) Price 10 cents.

Timber Physics, Part II. Progress Report. Results of Investigations on Long-Leaf Pine (*Pinus palustris*). 1. Introductory. 2. Mechanical Tests Made at Washington University Testing Laboratory, St. Louis, Mo. 3. The Long-Leaf Pine: Its Characteristics and Distribution. 4. Results of Mechanical Tests.—Johnson. 5. Field Report Regarding Turpentine Timber.—Roth. 6. Resinous Contents and Their Distribution in the Long-Leaf Pine.—Gomberg. 7. Field Records of Test Materials.—Mohr. Under the direction of B. E. Fernow, Chief of Forestry Division. Pp. vii, 1-92, pls. 12, figs. 22. (Bulletin No. 8, Forestry Division.) Price 15 cents.

A Short Account of the Big Trees of California. Prepared in the Division of Forestry. Pp. 30, pls. 17. (Bulletin No. 28, Division of Forestry.) Price 15 cents.

- Traction Tests.** By Samuel T. Neely, Assistant Engineer, Office of Road Inquiry. Pp. 22, pls. 2, figs. 7. (Bulletin No. 20, Office of Road Inquiry.) Price 10 cents.
- Cereal Rusts of the United States: A Physiological Investigation.** By Mark Alfred Carleton, Assistant, Division of Vegetable Physiology and Pathology. Pp. 74, pls. 4, fig. 1. (Bulletin No. 16, Division of Vegetable Physiology and Pathology.) Price 10 cents.
- Horse-Radish.** By M. G. Kains. Pp. 8. (Circular No. 15, Division of Botany.)
- The Forces Which Operate to Destroy Roads, with Notes on Road Stones and Problems Therewith Connected.** By C. L. Whittle. Pp. 14, pls. 4. (Circular No. 29, Office of Road Inquiry.)
- List of National, State, and Local Road Associations and Kindred Organizations in the United States.** Pp. 14. (Circular No. 36, revised, Office of Public Road Inquiries.)

FARMERS' BULLETINS.

REPRINTS.

- Peanuts: Culture and Uses.** By R. B. Handy, of the Office of Experiment Stations. Pp. 24, fig. 1. (Farmers' Bulletin No. 25.)
- Souring of Milk and Other Changes in Milk Products.** Prepared in the Office of Experiment Stations. Pp. 23. (Farmers' Bulletin No. 29.)
- Silos and Silage.** By Charles S. Plumb, B. S., Professor of Animal Industry and Dairying in Purdue University and Director of the Indiana Agricultural Experiment Station. Pp. 32, figs. 10. (Farmers' Bulletin No. 32.)
- Peach Growing for Market.** By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 24, figs. 21. (Farmers' Bulletin No. 33.)
- Potato Culture.** By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)
- Sheep Feeding.** By John A. Craig, Professor of Animal Husbandry in the University of Wisconsin. [Under the supervision of the Office of Experiment Stations.] Pp. 24. (Farmers' Bulletin No. 49.)
- The Sugar Beet: Culture, Seed Development, Manufacture, and Statistics.** By H. W. Wiley, Chief of the Bureau of Chemistry and formerly Director of the Department Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. Second revised edition, by G. L. Spencer. (Farmers' Bulletin No. 52.)
- Asparagus Culture.** By R. B. Handy, Division of Publications. Pp. 40, figs. 17. (Farmers' Bulletin No. 61.)
- Good Roads for Farmers.** By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)
- Raising Sheep for Mutton.** By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)
- Suggestions to Southern Farmers.** Prepared in the Division of Publications. Pp. 48. (Farmers' Bulletin No. 98.)
- Southern Forage Plants.** Compiled from the publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)

- Earth Roads. By Maurice O. Eldridge, Assistant Director Public Road Inquiries. Pp. 24, figs. 20. (Farmers' Bulletin No. 136.)
- Winter Forage Crops for the South. By Carleton R. Ball, Assistant Agrostologist, Grass and Forage Plant Investigations, Bureau of Plant Industry. Pp. 36, figs. 27. (Farmers' Bulletin No. 147.)
- Clearing New Land. By Franklin Williams, jr., Farmer and Horticulturist, Fairfax County, Va. Pp. 24, figs. 7. (Farmers' Bulletin No. 150.)

REPRINTED FROM THE YEARBOOK OF THE DEPARTMENT OF
AGRICULTURE FOR 1901.

- The Prairie Dog of the Great Plains. By C. Hart Merriam, Chief of Division of Biological Survey. Pp. ii, 257-270, pls. 3, figs. 2.
- Construction of Good Country Roads. By Maurice O. Eldridge, Assistant in Office of Road Inquiry. Pp. ii, 317-324, pls. 2.
- Road Building with Convict Labor in the Southern States. By J. A. Holmes, Special Agent in Office of Public Road Inquiries for Southern Division. Pp. ii, 319-332, pls. 5.
- The Selection of Materials for Macadam Roads. By Logan Waller Page, Expert in Charge of Road Material Laboratory, Division of Chemistry. Pp. iii, 349-356.
- Little-Known Fruit Varieties Considered Worthy of Wider Dissemination. By William A. Taylor, Pomologist, in Charge of Field Investigations, Bureau of Plant Industry. Pp. iii, 381-392, pls. 7.
- A Working Plan for Southern Hardwoods, and Its Results. By John Foley, Field Assistant, Bureau of Forestry. Pp. ii, 471-476, pls. 3.
- Progress of the Beet Sugar Industry in the United States. By Charles F. Saylor, Special Agent and Investigator. Pp. ii, 487-502, pls. 4.
- Mountain Roads as a Source of Revenue. By James W. Abbott, Special Agent Rocky Mountain and Pacific Coast Division, Office of Public Road Inquiries. Pp. ii, 527-540, pls. 7.
- The Hemp Industry in the United States. By Lyster H. Dewey, Assistant Botanist, Bureau of Plant Industry. Pp. ii, 541-554, pls. 4, figs. 2.
- Wheat Ports of the Pacific Coast. By Edwin S. Holmes, jr., Field Agent, Division of Statistics. Pp. ii, 567-580, pls. 5.
- Mountain Roads. By James W. Abbott, Special Agent in Office of Public Road Inquiries for Western Division. Pp. iii, 183-198, pls. 3. (Reprint from Yearbook of Department of Agriculture for 1900.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902), reporting temperature and rainfall, with reference to their effect on crops. (Nos. 16, 17, 18, and 19 for the month of July, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

JOS. A. ARNOLD,
Acting Chief.

Approved:

WILLIS L. MOORE,
Acting Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

No. 445.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *August 30, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[August, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

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The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Progress of the Beet-Sugar Industry in the United States in 1901. By Charles F. Saylor, Special Agent. With Contributions from the Bureau of Plant Industry, prepared under the direction of B. T. Galloway, Chief of Bureau. Pp. 106, pls. 15, figs. 5. (Report No. 72.) Price 15 cents.

Experiment Station Record. Vol. XIII, No. 10. E. W. Allen, Ph. D., Editor. Pp. viii, 907–1,008. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

A History of the Lumber Industry in the State of New York. By William F. Fox. Pp. 59, frontispiece, pls. 19. (Bulletin No. 34, Bureau of Forestry.) Price 20 cents.

Berseem: The Great Forage and Soiling Crop of the Nile Valley. By David G. Fairchild, Agricultural Explorer for Seed and Plant Introduction. Pp. 20, pls. 14. (Bulletin No. 23, Bureau of Plant Industry.) Price 15 cents.

Description, varieties, and uses of this Egyptian clover.

List by Titles of Publications of the United States Department of Agriculture from 1840 to June, 1901, Inclusive. Compiled and Compared With the Originals by R. B. Handy and Minna A. Cannon, Document Section, Division of Publications. Pp. 216. (Bulletin No. 6, Division of Publications.) Price 15 cents.

Proceedings of the Third Annual Good Roads Convention of the Supervisors of the State of New York, Held at Albany, N. Y., January 28 and 29, 1902. Pp. 63, pls. 13. (Bulletin No. 22, Office of Public Road Inquiries.) Price 10 cents.

Interstate Commerce in Birds and Game. Pp. 3. (Circular No. 38, Division of Biological Survey.)

Plan of Distributing Tobacco Seed, and Cultural Directions for the Different Types of Tobacco Distributed. Pp. 15. (Circular, Bureau of Plant Industry.)

Monthly List of Publications, July, 1902. Pp. 4. (No. 444, Division of Publications.)

Crop Reporter, Vol. 4, No. 4. Published by the U. S. Department of Agriculture under the supervision of the Statistician.

A three-column quarto publication devoted to agricultural topics.

REPRINTS.

Contributions from the The U. S. National Herbarium. Vol. V, No. 4. Studies of Mexican and Central American Plants—No. 2. By J. N. Rose. Two New Species of Plants from the Northwestern United States. By L. F. Henderson. *Hesperogenia*, A New Genus of Umbelliferae from Mount Ranier. By J. M. Coulter and J. N. Rose. Three New Species of *Tradescantia* from the United States. By J. N. Rose. *Treleasea*, A New Genus of Commelinaceae. By J. N. Rose. Notes on Useful Plants of Mexico. By J. N. Rose. Pp. viii, 145–259, viii, pls. 47, figs. 26. Price 25 cents.

The Timber Pines of the Southern United States. By Charles Mohr, Ph. D. Together with a Discussion of the Structure of The r Wood, by Filibert Roth. Pp. 176, pls. 27, figs. 18. (Bulletin No. 13, Bureau of Forestry, revised edition.) Price 35 cents.

The White Pine (*Pinus Strobus* Linn.). By V. M. Spalding, Professor of Botany in the University of Michigan. Revised and Enlarged by B. E. Fernow, Chief of the Division of Forestry. With contributions: Insect Enemies of the White Pine, by F. H. Chittenden, Division of Entomology. The Wood of the White Pine, by Filibert Roth, Division of Forestry. Pp. 185, frontispiece, pls. 13, figs. 40. Quarto. (Bulletin No. 22, Bureau of Forestry.) Price 40 cents.

Sooty Mold of the Orange and Its Treatment. By Herbert J. Webber, Assistant, Division of Vegetable Physiology and Pathology. Pp. 44, pls. 5. (Bulletin No. 13, Division of Vegetable Physiology and Pathology.) Price 10 cents.

Spot Disease of the Violet (*Alternaria violæ* n. sp.). By P. H. Dorsett, Associate, Division of Vegetable Physiology and Pathology. Pp. 16, pls. 7. (Bulletin No. 23, Division of Vegetable Physiology and Pathology.) Price 10 cents.

The Basis For the Improvement of American Wheats. By Mark Alfred Carleton, Cerealist, Division of Vegetable Physiology and Pathology. Pp. 87, frontispiece, pls. 10, figs. 5. (Bulletin No. 24, Division of Vegetable Physiology and Pathology.) Price 10 cents.

The Larger Apple-Tree Borers. By F. H. Chittenden, Assistant Entomologist. Pp. 12, figs. 3. (Circular No. 32, second series, Division of Entomology—revised edition.)

The Social, Commercial, and Economic Phases of the Road Subject. Pp. 8. (Circular No. 34, Office of Public Road Inquiries.)

Keeping Goats for Profit. By Almont Barnes, of the Division of Statistics. Pp. ii, 421-438, pls. 2. (Reprint from Yearbook of Department of Agriculture for 1898.)

Grazing in the Forest Reserves. By Filibert Roth, Chief of the Forestry Division of the General Land Office, Department of the Interior. Pp. ii, 333-348, pls. 8. (Reprint from Yearbook of Department of Agriculture for 1901.)

Statistical Matter Relating to Principal Crops and Farm Animals, Freight Rates, Exports, etc., in the United States—1901. Pp. 697-810. (Reprint from Yearbook of Department of Agriculture for 1901.)

FARMERS' BULLETINS.

The Propagation of Plants. By L. C. Corbett, Horticulturist, Bureau of Plant Industry. Pp. 24, figs. 22. (Farmers' Bulletin No. 157.)

Description of propagation by seeds and cuttings, layering, grafting, and budding.

How to Build Small Irrigation Ditches. By C. T. Johnston, C. E., and J. D. Stannard, Assistants in Irrigation Investigations, Office of Experiment Stations. Pp. 28, figs 9. (Farmers' Bulletin No. 158.)

Directions for building small irrigation ditches on the farm.

REPRINTS.

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 40. (Farmers' Bulletin No. 22, revised edition.)

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)

Weeds and How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 31, figs. 11. (Farmers' Bulletin No. 28, revised edition.)

Grape Diseases on the Pacific Coast. By Newton B. Pierce, Division of Vegetable Physiology and Pathology. Pp. 15, figs. 3. (Farmers' Bulletin No. 30.)

Alfalfa, or Lucern. By Jared G. Smith, Assistant Agrostologist. Pp. 24, figs. 3. (Farmers' Bulletin No. 31.)

Silos and Silage. By Charles S. Plumb, B. S., Professor of Animal Industry and Dairying in Purdue University, and Director of the Indiana Agricultural Experiment Station. Pp. 32, figs 10. (Farmers' Bulletin No. 32.)

Cotton Seed and Its Products. Prepared in the Office of Experiment Stations. Pp. 16. (Farmers' Bulletin No. 36.)

Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)

- Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee, and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31, figs. 3. (Farmers' Bulletin No. 39.)
- Sewage Disposal on the Farm, and the Protection of Drinking Water. By Theobald Smith, M. D., Professor in Harvard University, Pathologist to the Massachusetts State Board of Health, etc. Pp. 20, figs. 8. (Farmers' Bulletin No. 43.)
- Commercial Fertilizers: Composition and Use. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations, and Professor of Agriculture in Rutgers College. Under the supervision of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 44.)
- The Manuring of Cotton. (Condensed from an article by H. C. White, Ph. D., in Bulletin No. 33 of the Office of Experiment Stations.) Pp. 16. (Farmers' Bulletin No. 48.)
- Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the Supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)
- The Sugar Beet: Culture, Seed Development, Manufacture, and Statistics. By H. W. Wiley, Chief of the Bureau of Chemistry, and formerly Director of the Department Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. Second revised edition, by G. L. Spencer. (Farmers' Bulletin No. 52.)
- The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. [Reprinted with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.] Pp. 24. (Farmers' Bulletin No. 55.)
- Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under Supervision of the Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)
- Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)
- Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)
- Milk as Food. Prepared in the Office of Experiment Stations. Pp. 39, charts 2. (Farmers' Bulletin No. 74.)
- The Grain Smuts: How They Are Caused and How to Prevent Them. By Walter T. Swingle, Special Agent, Division of Vegetable Physiology and Pathology. Pp. 20, figs. 8. (Farmers' Bulletin No. 75.)
- The Liming of Soils. By H. J. Wheeler, Ph. D., Chemist of the Rhode Island Agricultural Experiment Station. Pp. 20. (Farmers' Bulletin No. 77.)

- The Peach-Twig Borer: An Important Enemy of Stone Fruits. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 16, figs. 5. (Farmers' Bulletin No. 80.)
- Corn Culture in the South. By S. M. Tracy, M. S. Pp. 24. (Farmers' Bulletin No. 81.)
- Potato Diseases and Their Treatment. By B. T. Galloway, Chief of the Division of Vegetable Physiology and Pathology. Pp. 12, figs. 4. (Farmers' Bulletin No. 91.)
- The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.)
- Suggestions to Southern Farmers. Prepared in the Division of Publications. Pp. 48. (Farmers' Bulletin No. 98.)
- Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted from the Report of the Bureau of Animal Industry for 1898.) Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)
- The Apple and How to Grow It. By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)
- Beans, Peas, and Other Legumes as Food. By Mary Hinman Abel. Prepared under the Supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 10. (Farmers' Bulletin No. 121, revised edition.)
- Experiment Station Work—XVII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 124.)
- Practical Suggestions for Farm Buildings. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)
- Important Insecticides: Directions for Their Preparation and Use. [A revision of Farmers' Bulletin No. 19.] By C. L. Marlatt, First Assistant Entomologist. Pp. 42, figs. 6. (Farmers' Bulletin No. 127.)
- Sweet Potatoes. By D. M. Nesbit. Pp. 40. (Farmers' Bulletin No. 129.)
- Household Tests for the Detection of Oleomargarine and Renovated Butter. By G. E. Patrick, Assistant in the Division of Chemistry. Pp. 11. (Farmers' Bulletin No. 131.)
- The Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 48, figs. 7. (Farmers' Bulletin No. 137.)
- Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 141.)
- Conformation of Beef and Dairy Cattle. By Andrew M. Soule, Professor of Agriculture and Vice Director of Tennessee Agricultural Experiment Station. Pp. 44, figs. 44. (Farmers' Bulletin No. 143.)
- Experiment Station Work—XIX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 9. (Farmers' Bulletin No. 144.)

Celery Culture. By W. R. Beattie, in Charge of Testing Gardens, Office of Botanical Investigations and Experiments. Pp. 32, figs. 7. (Farmers' Bulletin No. 148.)

The Home Fruit Garden: Preparation and Care. By L. C. Corbett, Horticulturist, Bureau of Plant Industry. Pp. 20, figs. 6. (Farmers' Bulletin No. 154.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. April, 1902, Vol. XXX, No. 4. Prepared under the direction of Willis L. Moore, Chief, U. S. Weather Bureau. Pp. 157-243, charts 8, map, figs. 4. Price 20 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902), reporting temperature and rain fall, with reference to their effect on crops. (Nos. 20, 21, 22, and 23 for the month of August, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

GEO. WM. HILL,
Editor and Chief.

Approved:
JAMES WILSON,
Secretary of Agriculture.

NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, of the Bureau of Animal Industry, of the Bureau of Soils, and of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *September 30, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[September, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

State and Territorial Laws Relating to Contagious and Infectious Diseases of animals. 1901. Pp. 72. (Bulletin No. 43, Bureau of Animal Industry.) Price 5 cents.

The Chemical Composition of Insecticides and Fungicides, with an Account of the Methods of Analysis Employed by J. K. Haywood, Chief of Insecticide and Agricultural Water Laboratory. In cooperation with the Division of Entomology. Pp. 62, fig. 1. (Bulletin No. 68, Bureau of Chemistry.) Price 5 cents.

Report on Codling-Moth Investigations in the Northwest During 1901. By C. B. Simpson, Investigator. Pp. 29, pls. 5, fig. 1. (Bull. No. 35, n. s., Division of Entomology.) Price 10 cents.

An Index to Bulletins Nos. 1-30 (new series) (1896-1901) of the Division of Entomology. Compiled under the direction of the Entomologist, by Nathan Banks, Assistant Entomologist. Pp. 64. (Bull. No. 36, n. s., Division of Entomology.) Price 5 cents.

Proceedings of the Fifteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, Held at Washington, D. C., November 12-14, 1901. Edited by A. C. True and W. H. Beal, for the Office of Experiment Stations, and H. C. Goodell, for the Executive Committee of the Association. Pp. 134, charts 8, fig. 1. (Bulletin No. 115, Office of Experiment Stations.) Price 10 cents.

Dietary Studies in New York City in 1896 and 1897. By W. O. Atwater, Ph. D., Professor of Chemistry, Wesleyan University; Chief of Nutrition Investigations, Office of Experiment Stations, and A. P. Bryant, M. S., Assistant in Nutrition Investigations. Pp. 83. (Bulletin No. 116, Office of Experiment Stations.) Price 5 cents.

Experiments on the Effect of Muscular Work upon the Digestibility of Food and the Metabolism of Nitrogen. Conducted at the University of Tennessee, 1899-1900. By Chas. E. Wait, Ph. D., F. C. S., Professor of Chemistry at the University of Tennessee. Pp. 43. (Bulletin No. 117, Office of Experiment Stations.) Price 5 cents.

Experiment Station Record. Vol. XIII, No. 11. E. W. Allen, Ph. D., Editor. Pp. x, 1009-1112. Price 10 cents.

Experiment Station Record. Vol. XIV, No. 1. E. W. Allen, Ph. D., Editor. Pp. x, 1-100. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries;

articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Agricultural Imports of the United Kingdom, 1896-1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 227. (Bulletin No. 26, Section of Foreign Markets.) Price 15 cents.

Sources of the Agricultural Imports of the United States, 1897-1901. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 132. (Bull. No. 28, Section of Foreign Markets.) Price 10 cents.

Distribution of the Agricultural Exports of the United States, 1897-1901. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 202. (Bulletin No. 29, Section of Foreign Markets.) Price 15 cents.

The Western Hemlock. By Edward T. Allen, Field Assistant, Bureau of Forestry. Pp. 55, frontispiece, pls. 12, figs. 5. (Bulletin No. , Bureau of Forestry.) Price 20 cents.

Catalogue of Publications Relating to Botany in the Library of the U. S. Department of Agriculture. Prepared under the Direction of the Librarian. Pp. 242. (Library Bulletin No. 42.) Price 15 cents.

Accessions to the Department Library. April-June, 1902. Pp. 37. (Library Bulletin No. 43.) Price 5 cents.

Manufacture of Semolina and Macaroni. By Robert P. Skinner, Consul General at Marseille. Vegetable, Pathological, and Physiological Investigations. Pp. 31, pls. 5, figs. 6. (Bulletin No. 20, Bureau of Plant Industry.) Price 15 cents.

Spanish Almonds and Their Introduction into America. By David G. Fairchild, Agricultural Explorer, Seed Introduction and Distribution. Pp. 16, frontispiece, pls. 7. (Bulletin No. 26, Bureau of Plant Industry.) Price 15 cents.

Message from the President of the United States, Transmitting a Report of the Secretary of Agriculture in Relation to the Forests, Rivers and Mountains of the Southern Appalachian Region. Pp. 210, pls. 78. (Senate Doc. No. 84, 51st Congress, 1st sess.) Price cloth \$1.20, paper \$1.10. Distribution by Congressmen.

Monthly List of Publications. August, 1902, Pp. 7. (No. 445, Division of Publications.)

Publications of the U. S. Department of Agriculture, for sale by the Superintendent of Documents, Union Building, Washington, D. C. Corrected to August 1, 1902. Pp. 45. (No. 179, Division of Publications.) 9th edition.

Crop Reporter, Vol. 4, No. 5. Published by the U. S. Department of Agriculture under the supervision of the Statistician.

A three-column quarto publication devoted to agricultural topics.

REPRINTS.

Contributions from the U. S. National Herbarium. Vol. VII, No. 1. Monograph of the North American Umbelliferae. By John M. Coulter and J. N. Rose. Pp. 256, vii, pls. 9, figs. 65. Price 20 cents.

- Foods and Food Adulterants. Investigations made under direction of H. W. Wiley, Chief of the Bureau of Chemistry. By W. D. Bigelow, with the collaboration of Edward Mackay Chace, L. S. Munson, L. M. Tolman, and others. Part Tenth. Preserved Meats. Pp. ix, 1375-1517, figs. 3. (Bulletin No. 13, Bureau of Chemistry.) Price 10 cents.
- Methods of Analysis Adopted by the Association of Official Agricultural Chemists, November 11, 12, and 14, 1898. Edited by Harvey W. Wiley, Secretary. Pp. 86, figs. 4. (Bulletin No. 46, Revised edition, Division of Chemistry.) Price 5 cents.
- Proceedings of the Seventeenth Annual Convention of the Association of Official Agricultural Chemists, Held at Washington, D. C., November 16, 17, and 19, 1900. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 163, pls. 2. (Bulletin No. 62, Division of Chemistry.) Price 10 cents.
- Provisional Methods for the Analysis of Foods Adopted by the Association of Official Agricultural Chemists, November 14-16, 1901. Edited by H. W. Wiley, Secretary, with the collaboration of W. D. Bigelow, Referee on Food Adulteration. Pp. 169, figs. 7. (Bulletin No. 65, Bureau of Chemistry.) Price 10 cents.
- Proceedings of the Eighteenth Annual Convention of the Association of Agricultural Chemists Held at Washington, D. C., November 14, 15, and 16, 1901. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 184, frontispiece. (Bulletin No. 67, Bureau of Chemistry.) Price 10 cents.
- The Principal Household Insects of the United States. By L. O. Howard and C. L. Marlatt, with a chapter on Insects Affecting Dry Vegetable Foods. By F. H. Chittenden. Pp. 131, pls. 64. (Bulletin No. 4, new series, revised edition, Division of Entomology.) Price 10 cents.
- The Cotton Plant: Its History, Botany, Chemistry, Culture, Enemies, and Uses. Prepared under the supervision of A. C. True, Ph. D., Director of the Office of Experiment Stations, with an introduction by Chas. W. Dabney, jr., Ph. D., Assistant Secretary of Agriculture. Pp. 433, pls. 4, figs. 32. (Bulletin No. 33, Office of Experiment Stations.) Price 35 cents.
- The Reservoir System of the Cache La Poudre Valley. By E. S. Nettleton. Pp. 48, pls. 14. (Bulletin No. 92, Office of Experiment Stations.) Price 15 cents.
- The Bedbug (*Cimex lectularius* Linn.). By C. L. Marlatt, First Assistant Entomologist. Pp. 8, figs. 3. (Circular No. 47, second series.)
- The Silver Fish (*Lepisma saccharina* Linn.). By C. L. Marlatt, First Assistant Entomologist. Pp. 4, figs. 2. (Circular No. 49, second series, Division of Entomology.)
- Cockroaches. By C. L. Marlatt, First Assistant Entomologist. Pp. 15, figs. 5. (Cir. No. 51, 2d ser., Division of Entomology.)
- Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands. By Gifford Pinchot, Forester. Pp. 5. (Circular No. 21, Division of Forestry.)

REPRINTED FROM THE YEARBOOK OF THE DEPARTMENT OF AGRICULTURE FOR 1901.

Grazing in the Forest Reserves. By Filibert Roth, Chief of the Forestry Division of the General Land Office, Department of the Interior. Pp. ii, 333-348, pls. 8.

The Present Status of the Mexican Cotton-Boll Weevil in the United States. By W. D. Hunter, Special Agent, Division of Entomology. Pp. ii, 369-380, fig. 1.

A Working Plan for Southern Hardwoods, and its Results. By John Foley, Field Assistant, Bureau of Forestry. Pp. ii, 471-476, pls. 3.

A Directory for Farmers; with Crop Conditions, Injuries, etc., for 1901. Pp. 611-697, figs. 5.

Practical Forestry in the Southern Appalachians. By Overton W. Price, Superintendent of Working Plans, Division of Forestry. Pp. iii, 357-368, pls. 6. [Reprinted from Yearbook of Department of Agriculture for 1900.]

REPRINTED FROM EIGHTEENTH ANNUAL REPORT OF THE BUREAU OF ANIMAL INDUSTRY, 1901.

Frogs, Toads, and Carp (*Cyprinus Carpio*) as Eradicators of Fluke Disease. By Ch. Wardell Stiles, Ph. D., Zoologist of Bureau of Animal Industry. Pp. 220-222, figs. 7.

The Significance of the Recent American Cases of Hookworm Disease (*Uncinariasis* or *Anchylostomiasis*) in Man. By Ch. Wardell Stiles, Ph. D., Zoologist of Bureau of Animal Industry. Pp. iii, 183-222, figs. 90.

Further Investigations on Verminous Diseases of Cattle, Sheep, and Goats in Texas. By Ch. Wardell Stiles, Ph. D., Zoologist of Bureau of Animal Industry. Pp. iii, 223-229.

A Variety of Hog Cholera Bacillus which Closely Resembles *Bacillus Typhosus*. By M. Dorset, M. D. Note on Branched Forms of Tubercle Bacilli Found in Cultures. By M. Dorset, M. D. The Use of Eggs as a Medium for the Cultivation of *Bacillus Tuberculosis*. By M. Dorset, M. D. Pp. 566-578.

Virulence of the Bovine Tuberculosis Bacillus for Monkeys and the Effect of Tuberculins Made from Tuberculosis Bacilli Derived from Different Animals. By A. E. de Schweinitz, Ph. D., M. D., Chief of Biochemic Division, Bureau of Animal Industry, and E. C. Schroeder, M. D. V., Superintendent of Experiment Station, Bureau of Animal Industry. Pp. ii, 579-582.

REPRINTED FROM BULLETIN NO. 100, OFFICE OF EXPERIMENT STATIONS, IRRIGATION INVESTIGATIONS IN CALIFORNIA.

The Agricultural Situation in California. By Elwood Mead, Irrigation Expert in Charge. Pp. iv, 17-69, 397-400, pls. 6.

The Irrigation Problems of Honey Lake Basin, California. By William E. Smythe, Vice-President of the California Water and Forest Association. Pp. iii, 71-113, pl. 1.

Features and Water Rights of Yuba River, California. By Marsden Manson, C. E., Ph. D. Pp. iv, 115-154, pls. 3, figs. 4.

Irrigation Investigations on Cache Creek. By J. M. Wilson, C. E., Agent and Expert, Irrigation Investigations. Pp. iv, 155-191, pls. 8.

Report of Irrigation Problems in the Salinas Valley. By Charles D. Marx, Professor of Civil Engineering in Leland Stanford Junior University. Pp. iv, 193-213, pls. 2, figs. 7.

Irrigation from the San Joaquin River. By Frank Soulé, Professor of Civil Engineering in the University of California. Pp. iv, 215-258, pls. 3.

Water Appropriations from Kings River. By C. E. Grunsky, C. E., City Engineer of San Francisco. Pp. iv, 259-325, pls. 4, figs. 5.
 A Study of Water Rights on the Los Angeles River, California. By Edward M. Boggs, C. E., Consulting Engineer. Pp. iii, 327-351.

Problems of Water Storage on Torrential Streams of Southern California as Typified by Sweetwater and San Jacinto Rivers. By James D. Schuyler, Hydraulic Engineer. Pp. iii, 353-395, pls. 2.

REPRINTED FROM BULLETIN NO. 104, OFFICE OF EXPERIMENT STATIONS, REPORT OF IRRIGATION INVESTIGATIONS FOR 1900.

Report of Irrigation Investigations for 1900. No. 1. Review of the Work. By Elwood Mead, Irrigation Expert in Charge. Discussion of Investigations. By C. T. Johnston, Assistant in Irrigation Investigations. Pp. viii, 21-59, pls. 3, figs. 10.

Report of Irrigation Investigations for 1900. No. 2. Irrigation on Pecos River and Its Tributaries. By W. M. Reed, Special Agent. Irrigation in the Salt River Valley. By W. H. Code, Special Agent. Duty of Water Under the Gage Canal, Riverside, Cal., 1900. By W. Irving, C. E. Pp. v, 61-146, pls. 5, figs. 7.

Report of Irrigation Investigations for 1900. No. 4. Use of Water in Irrigation in the Yakima Valley. By O. L. Waller, Professor of Mathematics and Civil Engineering, Washington Agricultural College and School of Science. Irrigation Investigations in Montana, 1900. By Samuel Fortier, C. E., Professor of Irrigation Engineering, Montana College of Agriculture and Mechanic Arts. Progress Report on Silt Measurements. By J. C. Nagle, C. E. Pp. v, 241-324, pls. 9, figs. 3.

REPRINTED FROM ANNUAL REPORT OF THE OFFICE OF EXPERIMENT STATIONS FOR 1901.

Annual Report of the Alaska Agricultural Experiment Stations for 1901. By C. C. Georgeson, Special Agent in Charge. Pp. v, 239-359, pls. 17.

Annual Report of the Hawaii Agricultural Experiment Station for 1901. By Jared G. Smith, Special Agent in Charge. Pp. iv, 361-379, pls. 8.

Annual Report of the Porto Rico Agricultural Experiment Station for 1901. By F. D. Gardner, Special Agent in Charge. Pp. iv, 381-415, pls. 5.

The Scope and Purpose of Irrigation Investigations of the Office of Experiment Stations. By Elwood Mead, Irrigation Expert in Charge. Pp. iv, 417-436, pls. 4.

Scope and Results of the Nutrition Investigations of the Office of Experiment Stations. Pp. iv, 437-482.

Irrigation in Utah. By R. C. Gemmel, State Engineer of Utah, and George L. Swendsen, Professor of Civil Engineering, Agricultural College of Utah. Pp. iv, 197-218, pls. 12. [Reprinted from U. S. Department of Agriculture, Office of Experiment Stations Bulletin No. 86.]

FARMERS' BULLETINS.

The Home Vineyard, with Special Reference to Northern Conditions. By W. H. Ragan, Special Agent, Bureau of Plant Industry, Pomological Investigations. Pp. 24, figs. 15. (Farmers' Bulletin No. 156.)

Game Laws for 1902. A Summary of the Provisions Relating to Seasons, Shipment, Sale, and Licenses. By T. S. Palmer and H. W. Olds, Assistants Biological Survey. Pp. 56, figs. 3, (Farmers' Bulletin No. 160.)

REPRINTS.

- Leguminous Plants for Green Manuring and for Feeding. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 16.)
- The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 40. (Farmers' Bulletin No. 22, revised edition.)
- Peanuts: Culture and Uses. By R. B. Handy, of the Office of Experiment Stations. Pp. 24, fig. 1. (Farmers' Bulletin No. 25.)
- Flax for Seed and Fiber in the United States. By Chas. Richards Dodge, Special Agent for Fiber Investigations. Pp. 16. (Farmers' Bulletin No. 27.)
- Weeds and How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 31, figs. 11. (Farmers' Bulletin No. 28, revised edition.)
- Souring of Milk and Other Changes in Milk Products. Prepared in the Office of Experiment Stations. Pp. 23. (Farmers' Bulletin No. 29.)
- Peach Growing for Market. By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 24, figs. 21. (Farmers' Bulletin No. 33.)
- Meats: Composition and Cooking. By Chas. D. Woods, Office of Experiment Stations. Pp. 29, figs. 4. (Farmers' Bulletin No. 34.)
- Kafir Corn: Characteristics, Culture, and Uses. By C. C. Georgeson, Professor of Agriculture in Kansas State Agricultural College. Pp. 12, fig. 1. (Farmers' Bulletin No. 37.)
- Insects Affecting the Cotton Plant. By L. O. Howard, Ph. D., Entomologist. [Reprinted from Bulletin 33, Office of Experiment Stations.] Pp. 32, figs. 18. (Farmers' Bulletin No. 47.)
- Sheep Feeding. By John A. Craig, Professor of Animal Husbandry in the University of Wisconsin. Pp. 24. (Farmers' Bull. No. 49.)
- Sorghum as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Pp. 20, fig. 1. (Farmers' Bulletin No. 50, revised edition.)
- How to Grow Mushrooms. By William Falconer. Under the supervision of the Division of Vegetable Physiology and Pathology. Pp. 20, figs. 14. (Farmers' Bulletin No. 53.)
- The Soy Bean as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. With an appendix on Soy Beans as Food for Man. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 24, fig. 5. (Farmers' Bulletin No. 58.)
- Asparagus Culture. By R. B. Handy, Division of Publications. Pp. 40, figs. 17. (Farmers' Bulletin No. 61.)
- Marketing Farm Produce. By George G. Hill, Formerly Manager and Editor of The American Farmer, Illinois. Pp. 28, figs. 7. (Farmers' Bulletin No. 62.)
- Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)

- Meadows and Pastures: Formation and Cultivation in the Middle Eastern States.** By Jared G. Smith, Assistant Agrostologist. Pp. 28, figs. 9. (Farmers' Bulletin No. 66, revised edition.)
- The Black Rot of the Cabbage.** By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 22, fig. 1. (Farmers' Bulletin No. 68.)
- The Principal Insect Enemies of the Grape.** By C. L. Marlatt, M. S., First Assistant Entomologist. [Reprinted from original plates from the Yearbook of the U. S. Department of Agriculture for 1895.] Pp. 24, figs. 12. (Farmers' Bulletin No. 70.)
- Some Essentials in Beef Production.** By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs. 17. (Farmers' Bulletin No. 71.)
- The Culture of Tobacco.** By Otto Carl Butterweck. Pp. 24. (Farmers' Bulletin No. 82.)
- Tobacco Soils.** By Milton Whitney, Chief of Division of Soils. Pp. 23, figs. 1. (Farmers' Bulletin No. 83.)
- Experiment Station Work—VIII.** Prepared in the Office of Experiment Stations. Pp. 32, figs. 6. (Farmers' Bulletin No. 87.)
- Cowpeas.** By Jared G. Smith, Assistant Agrostologist. Pp. 16, fig. 1. (Farmers' Bulletin No. 89.)
- Experiment Station Work—IX.** Prepared in the Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 92.)
- Sugar as Food.** By Mary Hinman Abel. Prepared under the supervision of Office of Experiment Stations. Pp. 27. (Farmers' Bulletin No. 93.)
- Experiment Station Work—X.** Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 97.)
- Hog Raising in the South.** By S. M. Tracy, M. S. Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40. (Farmers' Bulletin No. 100.)
- Southern Forage Plants.** Compiled from the publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)
- Experiment Station Work—XI.** Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 103.)
- Notes on Frost.** By E. B. Garriott, Professor of Meteorology, Weather Bureau. Pp. 24. (Farmers' Bulletin No. 104.)
- Experiment Station Work—XIII.** Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 3. (Farmers' Bulletin No. 107.)
- Farmers' Reading Courses.** (Abridgment of Bulletin No. 72, Office of Experiment Stations by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)
- Sheep, Hogs, and Horses in the Pacific Northwest.** I. Sheep Husbandry, by James Withycombe, V. S., Vice-Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

- Experiment Station Work—XV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 31, figs. 5. (Farmers' Bulletin No. 119.)
- Protection of Food Products from Injurious Temperatures. By H. E. Williams, Chief Clerk, Weather Bureau. Pp. 26. (Farmers' Bulletin No. 125.)
- The Principal Insect Enemies of Growing Wheat. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 40, fig. 25. (Farmers' Bulletin No. 132.)
- Tree Planting on Rural School Grounds. By Wm. L. Hall, Assistant Superintendent of Tree Planting, Bureau of Forestry. Pp. 32, figs. 17. (Farmers' Bulletin No. 134.)
- Earths Roads. By Maurice O. Eldridge, Assistant Director, Public Road Inquiries. Pp. 24, figs. 20. (Farmers' Bulletin No. 136.)
- Principals of Nutrition and Nutritive Value of Food. By W. O. Atwater, Ph. D., Special Agent in Charge of Nutrition Investigations, Office of Experiment Stations. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 48, charts 2. (Farmers' Bulletin No. 142, Revised edition.)
- Winter Forage Crops for the South. By Carleton R. Ball, Assistant Agrostologist, Grass and Forage Plant Investigations, Bureau of Plant Industry. Pp. 36, figs. 24. (Farmers' Bulletin No. 147.)
- Clearing New Land. By Franklin Williams, Jr., Farmer and Horticulturist, Fairfax County, Va. Pp. 24, figs. 7. (Farmers' Bulletin No. 150.)
- Dairying in the South. By S. M. Tracy, M. S., Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 48, figs. 4. (Farmers' Bulletin No. 151.)
- How Insects Affect Health in Rural Districts. By L. O. Howard, Entomologist. Pp. 20, figs. 16. (Farmers' Bulletin No. 155.)

PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

- Monthly Weather Review. Vol. XXX, No. 5. May, 1902. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 245-292, figs. 13, charts 8, pls. 1. (W. B. No. 270.) Price 20 cents; \$2 per year.
- Monthly Weather Review. Vol. XXX, No. 6. June, 1902. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 293-340, figs. 3, charts 8. (W. B. No. 271.) Price 20 cents; \$2 per year.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902), reporting temperature and rainfall, with reference to their effect on crops. (Nos. 24, 25, 26, 27, and 28 for the month of September, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

JOS. A. ARNOLD,
Acting Chief.

Approved:
JAMES WILSON,
Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *October 31, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[OCTOBER, 1902.]

NOTE.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed, except for Weather Bureau publications, for which payment may be made to the Chief of the Bureau.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of Documents.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

North American Fauna No. 22. A Biological Investigation of the Hudson Bay Region. By Edward A. Preble, Assistant Biologist, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 140, pls 14. Price 20 cents.

Annual Report of the Office of Experiment Stations for the Year Ended June 30, 1901. By A. C. True, Director. Pp. 489, pls. 41. Price: Cloth, 60 cents; paper, 50 cents.

Irrigation of Rice in the United States. By Frank Bond and George H. Keeney, Agents and Experts, Irrigation Investigations. Under the direction of Elwood Mead, Expert in Charge of Irrigation Investigations. Pp. 77, frontispiece, pls. 28, figs. 10. (Bulletin No. 113, Office of Experiment Stations.) Price 30 cents.

Results of investigations regarding means to be employed for overcoming difficulties which are now obstructing the progress of the rice industry in this country.

Irrigation from Big Thompson River. By John E. Field, Assistant State Engineer of Colorado. Pp. 75, frontispiece, pls. 5, fig. 1. (Bulletin No. 118, Office of Experiment Stations.) Price 10 cents.

Report on irrigation from Big Thompson River, Colorado, showing the legal status of water rights in the Big Thompson Valley, and in the State of Colorado as a whole.

Experiment Station Record. Vol. XIII, No. 12. E. W. Allen, Ph. D., Editor. Pp. xvii, 1,113-1,206, pls. 2, figs. 4. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly, the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

List of References to Publications Relating to Irrigation and Land Drainage. Compiled by Ellen A. Hedrick. Prepared under the direction of the Librarian. Pp. 181. (Library Bulletin No. 41.) Price 10 cents.

Injurious Effects of Premature Pollination; With General Notes on Artificial Pollination and the Setting of Fruit Without Pollination. By Charles P. Hartley, Assistant in Physiology, Plant-Breeding Laboratory, Vegetable Pathological and Physiological Investigations. Pp. 48, pls. 4, fig. 1. (Bulletin No. 22, Bureau of Plant Industry.) Price 10 cents.

Index to the Yearbooks of the U. S. Department of Agriculture, 1894-1900. Prepared by Charles H. Greathouse, an Assistant Editor, Division of Publications. Pp. 196. (Bulletin No. 7, Division of Publications.) Price 10 cents.

Monthly List of Publications, September, 1902. Pp. 8. (No. 446, Division of Publications.)

Crop Reporter. Vol. 4, No. 6. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 8.
A three-column quarto publication devoted to agricultural topics.

REPRINTS.

Foods and Food Adulterants. Investigations made under direction of H. W. Wiley, Chief Chemist, with the Collaboration of K. P. McElroy, W. H. Krug, T. C. Trescot, W. D. Bigelow and others. Cereals and Cereal Products. Pp. vii, 1169-1374, pls. 7, figs. 4. (Bulletin No. 13, Part 9, Division of Chemistry.) Price 15 cents.

The Fig: Its History, Culture, and Curing with a Descriptive Catalogue of the Known Varieties of Figs. By Gustav Eisen, Ph. D., Pp. 317, frontispiece, pls. 15, figs. 93. (Bulletin No. 9, Division of Pomology.) Price 35 cents.

Directions for the Use of Blackleg Vaccine. By Victor A. Nörsgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry, second revision.)

Highway Maintenance and Repairs. Highway Taxation; Comparative Results of Labor and Money Systems; Contract System of Maintaining Roads. By Roy Stone, Director, Office of Road Inquiry. Pp. 16. (Circular No. 24, revision of Nos. 16, 20, and 24.)

REPRINTED FROM THE YEARBOOK OF THE DEPARTMENT OF AGRICULTURE FOR 1901.

The Timber Resources of Nebraska. By William L. Hall, Superintendent of Tree Planting, Bureau of Forestry. Pp. ii, 207-216, pls. 6.

Road Building with Convict Labor in the Southern States. By J. A. Holmes, Special Agent in Office of Public Road Inquiries for Southern Division. Pp. ii, 319-332, pls. 5.

Some Typical Reservoirs in the Rocky Mountain States. By Elwood Mead, Irrigation Expert, in Charge of Irrigation Investigations, Office of Experiment Stations. Pp. iv, 415-430, pls. 8.

REPRINTS FROM OTHER PUBLICATIONS.

Steel-Track Wagon Roads. By Martin Dodge, Director of the Office of Road Inquiry. Pp. ii, 291-296, pls. 3, fig. 1. [Reprinted from Yearbook of Department of Agriculture for 1893.]

The Dairy Industry and Dairy Markets in Porto Rico, with Notes on St. Thomas and Cuba. By Raymond A. Pearson, M. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. vii, 306-397, pls. 35, figs. 6. [Reprinted from Eighteenth Annual Report of the Bureau of Animal Industry, 1901.]

The Angora Goat Industry. Progress of the Angora Goat Industry in 1901. By George Fayette Thompson. Mohair and Mohair Manufactures. By George Fayette Thompson. The Angora Goat Industry of Asia Minor. By Willard C. Bailey, M. D. Pp. iv, 457-506, pls. 24, fig. 1. [Reprinted from Eighteenth Annual Report of the Bureau of Animal Industry, 1901.]

Report on the Work and Expenditures of the Agricultural Experiment Stations for the year ended June 30, 1901. Pp. 231, pls. 7. [Reprinted from Annual Report of the Office of Experiment Stations for the year ended June 30, 1901.]

Federal Legislation, Regulations, and Rulings Affecting Agricultural Colleges and Experiment Stations. Pp. iii, 224-238. [Reprinted from Annual Report of the Office of Experiment Stations for the year ended June 30, 1901.]

Report of Irrigation Investigations for 1900. No. 3. Irrigation Investigation in Nevada. By J. M. Wilson, Agent and Expert. Water Administration in Utah. By Special Agent R. C. Gemmell, State Engineer of Utah. Irrigation Under Canals from Logan River. By George L. Swendsen, Professor of Irrigation Engineering, Utah Agricultural College. Irrigation Under the Great Eastern Canal, Platte County, Nebr., 1900. By O. V. P. Stout, Professor of Civil Engineering, University of Nebraska. Use of Water in Irrigation at Wheatland, Wyo. By C. T. Johnston, Assistant in Irrigation Investigations. Duty of Water in Idaho. By D. W. Ross, State Engineer. Pp. v, 147-239, pls. 8, figs. 9. [Reprinted from U. S. Department of Agriculture, Office of Experiment Stations Bulletin 104.]

FARMERS' BULLETINS.

REPRINTS.

Barnyard Manure. By W. H. Beal, of the Office of Experiment Stations. Pp. 32, figs. 7. (Farmers' Bulletin No. 21.)

Grape Diseases on the Pacific Coast. By Newton B. Pierce, Division of Vegetable Physiology and Pathology. Pp. 15, figs. 3. (Farmers' Bulletin No. 30.)

Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)

Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31, figs. 3. (Farmers' Bulletin No. 39.)

Farm Drainage. By C. G. Elliott, C. E., Member of the American Society of Civil Engineers, Peoria, Illinois. Pp. 24, figs. 6. (Farmers' Bulletin No. 40.)

Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. (Farmers' Bulletin No. 42.)

Commercial Fertilizers: Composition and Use. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture in Rutgers College. Under the Supervision of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 44.)

Some Insects Injurious to Stored Grain. By F. H. Chittenden, Assistant Entomologist. Pp. 24, figs. 18. (Farmers' Bulletin No. 45, revised edition.)

Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S., Assistant Ornithologist, Biological Survey. Pp. 40, figs. 22. (Farmers' Bulletin No. 54, revised edition.)

Experiment Station Work—I. Prepared in the Office of Experiment Stations. Pp. 31, figs. 10. (Farmers' Bulletin No. 56.)

Bee Keeping. By Frank Benton, M. S., Assistant Entomologist. Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)

Methods of Curing Tobacco. By Milton Whitney, Chief of Division of Soils. Pp. 24. (Farmers' Bulletin No. 60, second revised edition.)

Experiment Station Work—II. Pp. 32, figs. 7. (Farmers' Bulletin No. 65.)

Experiment Station Work—III. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 69.)

The Principal Insect Enemies of the Grape. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 24, figs. 12. (Farmers' Bulletin No. 70.)

Experiment Station Work—IV. Prepared in the Office of Experiment Stations. Pp. 32, figs. 3. (Farmers' Bulletin No. 73.)

Milk as Food. Prepared in the Office of Experiment Stations. Pp. 39, charts 2. (Farmers' Bulletin No. 74.)

Tomato Growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)

Experiment Station Work—VI. Prepared in the Office of Experiment Stations. Pp. 28, figs. 2. (Farmers' Bulletin No. 79.)

The Peach Twig-Borer: An Important Enemy of Stone Fruits. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 16, fig. 5. (Farmers' Bulletin No. 80.)

Fish as Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 32. (Farmers' Bulletin No. 85.)

Thirty Poisonous Plants of the United States. By V. K. Chesnut, Assistant Botanist, U. S. Department of Agriculture. Pp. 32, figs. 24. (Farmers' Bulletin No. 86.)

Alkali Lands. By Milton Whitney and Thomas H. Means. Pp. 23, fig. 1. (Farmers' Bulletin No. 88.)

Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)

Raising Sheep for Mutton. By Chas. F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)

Three Insect Enemies of Shade Trees. By L. O. Howard, Entomologist. [Reprinted, with some annotations by the author, from the Yearbook of the Department of Agriculture for 1895.] Pp. 30, figs. 11. (Farmers' Bulletin No. 99.)

Millets. By Thomas A. Williams, Assistant Agrostologist. Pp. 28, figs. 6. (Farmers' Bulletin No. 101.)

Experiment Station Work—XII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 4. (Farmers' Bulletin No. 105.)

The Farmer's Interest in Good Seed. By A. J. Pieters, in Charge of Pure Seed Investigations, Division of Botany. Pp. 24, figs. 7. (Farmers' Bulletin No. 111.)

Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)

Experiment Station Work—XIV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 28, figs. 5. (Farmers' Bulletin No. 114.)

Grape Growing in the South. By S. M. Tracy, M. S., Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 32, figs. 6. (Farmers' Bulletin No. 118.)

Experiment Station Work—XVI. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 122.)

Red Clover Seed: Information for Purchasers. By A. J. Pieters, Assistant Botanist, Division of Botany, In Charge of Pure-Seed Investigations. Pp. 11, figs. 2. (Farmers' Bulletin No. 123.)

Experiment Station Work—XVII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 124.)

Eggs and Their Uses as Food. By C. F. Langworthy, Ph. D. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32. (Farmers' Bulletin No. 128, revised edition.)

The Mexican Cotton-Boll Weevil. By Frederick W. Mally, M. Sc., Professor of Entomology, Agriculture, and Mechanical College, College Station, Texas. Pp. 30, figs. 4. (Farmers' Bulletin No. 130.)

Experiment Station Work—XVIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 14. (Farmers' Bulletin No. 133.)

Sorghum Sirup Manufacture. By A. A. Denton, Medicine Lodge, Kans. Pp. 40, figs. 26. (Farmers' Bulletin No. 135.)

Irrigation in Field and Garden. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Agricultural Experiment Station. Pp. 40, figs. 18. (Farmers' Bulletin No. 138.)

Emmer: A Grain for the Semiarid Regions. By Mark Alfred Carleton, Cerealists, Vegetable Pathological and Physiological Investigations, Bureau of Plant Industry. Pp. 16, figs. 3. (Farmers' Bulletin No. 139.)

Carbon Bisulphid as an Insecticide. By W. E. Hinds, Temporary Assistant of the Division of Entomology. Pp. 28. (Farmers' Bulletin No. 145.)

Insecticides and Fungicides: Chemical Composition and Effectiveness of Certain Preparations. By J. K. Haywood, in Charge of Insecticide and Agricultural Water Laboratory, Bureau of Chemistry. Prepared under the direction of H. W. Wiley, Chief Chemist, cooperating with the Division of Entomology. Pp. 16. (Farmers' Bulletin No. 146.)

Experiment Station Work—XX. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 149.)

Scabies in Cattle. By Richard W. Hickman, V. M. D., Chief of Miscellaneous Division, Bureau of Animal Industry. Pp. 24, figs. 15. (Farmers' Bulletin No. 152.)

Orchard Enemies in the Pacific Northwest. By C. V. Piper, State Agricultural College, Pullman, Wash. Pp. 39, fig. 1. (Farmers' Bulletin No. 153.)

The Home Vineyard, with Special Reference to Northern Conditions. By W. H. Ragan, Special Agent, Bureau of Plant Industry, Pomological Investigations. Pp. 24, figs. 15. (Farmers' Bulletin No. 156.)

PUBLICATIONS OF THE WEATHER BUREAU.

[For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.]

Monthly Weather Review, July, 1902. Volume XXX, No. 7. Prepared under the direction of Willis L. Moore, Chief, U. S. Weather Bureau. Pp. 341-392, figs. 11, charts 8. (W. B. No. 272.) Price 20 cents; \$2 per year.

Proceedings of the Second Convention of Weather Bureau Officials held at Milwaukee, Wis., August 27, 28, 29, 1901. Edited under the direction of Willis L. Moore, Chief U. S. Weather Bureau. By James Berry, Secretary of the Convention, and W. F. R. Phillips. Pp. 246, pls. 38, figs. 3. (Bulletin No. 31, Weather Bureau.) (W. B. No. 265.)

Charts of the Weather Bureau—

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

Cattle Markets and Abattoirs in Europe. By Henry E. Alvord, C. E., Chief of the Dairy Division, Bureau of Animal Industry. Pp. iii, 279-305, pls. 10. [Reprinted from Eighteenth Annual Report of the Bureau of Animal Industry, 1901.]

REPRINTS FROM THE PROCEEDINGS OF THE FIFTEENTH ANNUAL CONVENTION OF THE ASSOCIATION OF AMERICAN COLLEGES AND EXPERIMENT STATIONS. U. S. DEPARTMENT OF AGRICULTURE, OFFICE OF EXPERIMENT STATIONS BULLETIN 115.

Report of Section on Entomology. By M. V. Slingerland, B. S., Assistant Professor of Entomology, Cornell University, and Assistant Entomologist of the Cornell University Agricultural Experiment Station. Pp. 21-22.

Agricultural College Libraries. By Josephine A. Clark, Librarian, U. S. Department of Agriculture. Pp. 25-27.

Address of the President of the Association of American Agricultural Colleges and Experiment Stations. By A. W. Harris, D. Sc., LL. D., President of the University of Maine. Pp. 41-46.

Report of Section on Horticulture and Botany. By L. R. Jones, Ph. B., Professor of Botany, University of Vermont, and Botanist of the Vermont Experiment Station. Pp. 52-54.

Cooperative Experiments with Grasses and Forage Plants. By T. L. Lyon, B. S. A., Professor of Agriculture, Industrial College of the University of Nebraska, and Associate Director and Agriculturist of the Nebraska Experiment Station. Pp. 71-73.

Artificial Plant Food Requirements of Soils. By B. W. Kilgore, M. S., Director of the North Carolina Agricultural Experiment Station. Pp. 73-75.

Irrigation in the Humid Regions. Pp. 78-85, pls. 2.

Range Improvement and Administration. By R. H. Forbes, M. S., Professor of Chemistry, University of Arizona, and Director and Chemist of the Arizona Agricultural Experiment Station. Pp. 85-86.

Variation in Cross-Bred Wheats. By W. M. Hays, M. Agr., Professor of Agriculture, University of Minnesota, and Agriculturist of the Minnesota Experiment Station. Pp. 98-101.

GEO. WM. HILL,
Editor and Chief.

Approved:

WILLIS L. MOORE,
Acting Secretary of Agriculture.

NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, of the Bureau of Animal Industry, of the Bureau of Soils, and of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be the depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

This circular will be sent regularly to all who apply for it.

No. 451.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *November 29, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[NOVEMBER, 1902.]

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NEW PUBLICATIONS.

Report of the Secretary of Agriculture. 1902. Pp. 122.

Birds of a Maryland Farm. A Local Study of Economic Ornithology. By Sylvester D. Judd, Ph. D., Assistant, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of the Biological Survey. Pp. 116, pls. 17, figs. 41. (Bulletin No. 17, Division of Biological Survey.) Price 15 cents.

Foods and Food Control. By W. D. Bigelow, Chief of Food Laboratory. Pp. vi, 1-93. (Bulletin No. 69, Part I, Bureau of Chemistry.) Price 5 cents.

A compilation of the Federal food laws, together with the food laws of Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, the District of Columbia, Florida, Georgia, Hawaii, and Idaho.

Foods and Food Control. By W. D. Bigelow, Chief of Food Laboratory. Pp. vi, 95-187. (Bulletin No. 69, Part II, Bureau of Chemistry.) Price 5 cents.

Food laws now in force in Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, and Michigan.

Proceedings of the Fourteenth Annual Meeting of the Association of Economic Entomologists. Pp. 127, pls. 1, figs. 2. (Bulletin No. 37, new series, Division of Entomology.) Price 10 cents.

Some Miscellaneous Results of the Work in the Division of Entomology. VI. Prepared under the direction of the Entomologist. Pp. 110, pls. 2, figs. 9. (Bulletin No. 38, new series, Division of Entomology.) Price 10 cents.

Experiment Station Record. Vol. XIV, No. 2. E. W. Allen, Ph. D., Editor. Pp. viii, 101-204. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly, the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Accessions to the Department Library. July—September, 1902. Pp. 51. (Library Bulletin No. 44.) Price 5 cents.

The Woodsman's Handbook. By Henry Solon Graves, Director of the Yale Forest School. Part I. Pp. 148, pl. 1, figs. 15. (Bulletin No. 36, Bureau of Forestry.)

This volume comprises rules for finding the contents of logs and standing trees, methods of estimating timber, a brief outline of forest working plans, and a description of instruments useful in the woods.

The Hardy Catalpa. I. The Hardy Catalpa in Commercial Plantations. By William L. Hall, Superintendent of Tree Planting. II. The Diseases of the Hardy Catalpa. By Hermann von Schrenk, Pathologist in Charge Mississippi Valley Laboratory, Bureau of Plant Industry. Pp. 58, frontispiece, pls. 30, figs. 2. (Bulletin No. 37, Bureau of Forestry.) Price 25 cents.

Results of investigations made in the largest planted forests of Hardy Catalpa in this country, and an account of the behavior and requirements of this species when grown in close stand in commercial plantations.

The Manufacture and Preservation of Unfermented Grape Must. By George C. Husmann, Expert in Charge of Viticultural Investigations, Pomological Investigations. Pp. 19, frontispiece, figs. 4. (Bulletin No. 24, Bureau of Plant Industry.) Price 10 cents.

Field Operations of the Bureau of Soils, 1901. [Third Report.] By Milton Whitney, Chief. With Accompanying Papers by Assistants in Charge of Field Parties. Pp. 647, pls. 96, figs. 25, maps 31, in case. Cloth. Congressional Publication. Price \$2.25.

A report on the organization of the Bureau of Soils, progress and cost of the survey, cooperation with State organizations, and results of the soil survey of 6,557,350 acres in 15 States. This report was printed by act of Congress. The quota of the Department will be exhausted in supplying the regular exchange and mailing lists and the very large number of persons who aided and cooperated with the Bureau of Soils in its work. Miscellaneous applicants are, therefore, referred to their Senators, Representatives, and Delegates.

Crop Reporter. Vol. 4, No. 7. Published by the U. S. Department of Agriculture under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

Monthly List of Publications, October, 1902. Pp. 8. (No. 448, Division of Publications.)

Secondary Courses in Agriculture. [Extract from the Seventh Report of the Committee on Methods of Teaching Agriculture.] Pp. 10. (Circular No. 49, Office of Experiment Stations.)

REPRINTS.

Contributions from the United States National Herbarium, Vol. V, No. 6. Report on a Botanical Survey of the Dismal Swamp Region. Price 50 cents.

Bulletin No. 12, revised edition, Division of Biological Survey. Legislation for the Protection of Birds Other Than Game Birds. Price 10 cents.

Bulletin No. 25, new series, Division of Entomology. Notes on the Mosquitoes of the United States, Giving Some Account of Their Structure and Biology, with Remarks on Remedies. Price 5 cents.

- Bulletin No. 28, revised edition, Office of Experiment Stations. The Chemical Composition of American Food Materials. Price 5 cents.
- Bulletin No. 38, Office of Experiment Stations. Dietary Studies with Reference to the Food of the Negro in Alabama in 1895 and 1896. Price 5 cents.
- Bulletin No. 45, revised edition, Office of Experiment Stations. A Digest of Metabolism Experiments in Which the Balance of Income and Outgo Was Determined. Price 25 cents.
- Bulletin No. 63, Office of Experiment Stations. Description of a New Respiration Calorimeter and Experiments on the Conservation of Energy in the Human Body. Price 10 cents.
- Bulletin No. 100, Office of Experiment Stations. Report of Irrigation Investigations in California. Price, cloth, \$1.25; paper 90 cents.
- Bulletin No. 14, Bureau of Plant Industry. The Decay of Timber and Methods of Preventing It. Price 55 cents.
- Bulletin No. 5, Division of Pomology. Fig Culture: Edible Figs Their Culture and Curing. Price 5 cents.
- Bulletin No. 8, Division of Pomology. Revised Catalogue of Fruits Recommended for Cultivation in the Various Sections of the United States and the British Provinces, by the American Pomological Society. Price 5 cents.
- Bulletin No. 22, Public Road Inquiries. Proceedings of the Third Annual Good Roads Convention of the Boards of Supervisors of the State of New York, Held at Albany, N. Y., January 28 and 29, 1902. Price 10 cents.
- On the Study of Forest Entomology in America. [Reprinted from Bulletin No. 37, new series, Division of Entomology.]
- Résumé of the Search for the Native Home of the San Jose Scale in Japan and China. Preliminary Report on the Importation and Present Status of the Asiatic Ladybird. Predatory Insects Which Affect the Usefulness of Scale-Feeding Coccinellidæ. [Reprint from Bulletin No. 37, new series, Division of Entomology.]
- The Tobacco Stalk Weevil. [Reprinted from Bulletin No. 38, new series, Division of Entomology.]
- Irrigation Investigations on Cache Creek. [Reprinted from Bulletin No. 100, Office of Experiment Stations.]

PUBLICATIONS OF THE WEATHER BUREAU.

[For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.]

Studies on the Statics and Kinematics of the Atmosphere in the United States. Reprints from the Monthly Weather Review, January to July, 1902. By Frank H. Bigelow, M. A., L. H. D., Professor of Meteorology. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. iv, 1-62, figs. 29. (W. B. No. 293.)

Monthly Weather Review August, 1902. Vol. XXX, No. 8. Prepared under the direction of Willis L. Moore, Chief, U. S. Weather Bureau. Pp. 393-432, charts 8. (W. B. No. 274.) Price 20 cents; \$2 per year.

Charts of the Weather Bureau—

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

PUBLICATIONS NOT AVAILABLE.

REPRINTS FROM THE PROCEEDINGS OF THE FIFTEENTH ANNUAL CONVENTION OF THE ASSOCIATION OF AMERICAN COLLEGES AND EXPERIMENT STATIONS. U. S. DEPARTMENT OF AGRICULTURE, OFFICE OF EXPERIMENT STATIONS BULLETIN 115.

A Year's Experience with Crude Petroleum.

Florida Observations; Experimental Work.

Life History of the Sugar-Cane Borer in Louisiana.

Quantitative Studies on the Transmission of Parental Characters to Hybrid Offspring.

Some Entomological Suggestions and Notes.

Cooperation in Experimental Work Between the Station and the Farmer.

The Time of Emergence and Oviposition of the Spring Brood of the Hessian Fly.

Aphids of the Apple, Pear, and Quince.

Germination of Kentucky Blue Grass.

Root Knot of the Cowpea.

Insects of the Year in Massachusetts.

Report of Section on Mechanic Arts.

GEO. WM. HILL,
Editor and Chief.

Approved:

J. H. BRIGHAM,

Acting Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

No. 452.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *December 31, 1902.*

MONTHLY LIST OF PUBLICATIONS.

[DECEMBER, 1902.]

NOTE.—To obtain those publications, to which a **Price is affixed**, application must be made to the **Superintendent of Documents, Union Building, Washington, D. C.**, to whom all remittances must be directed, except for Weather Bureau publications, for which payment may be made to the Chief of the Bureau.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. **Free publications are not distributed by the Superintendent of Documents.**

The Department of Agriculture **does not distribute** nor control the distribution of publications of the **State Agricultural Experiment Stations**. Application for them should be made to the several stations in the different States.

NEW PUBLICATIONS.

Eighteenth Annual Report of the Bureau of Animal Industry for the Year 1901. Pp. 706, pls. 117, figs. 224. Cloth, price 90 cents; in paper, 75 cents.

CONTENTS: Report of the Chief of the Bureau—Emergency report on surra—The significance of the recent American cases of hookworm disease (*uncinaria* or *anchylostomiasis*) in man—Frogs, toads, and carp (*Cyprinus carpio*) as eradicators of fluke disease—Further investigations on verminous diseases of cattle, sheep, and goats in Texas—"Big head" of sheep in Utah—Blood poisoning (malignant edema) in sheep and lambs in New Zealand—Federal inspection of foreign and interstate shipments of live stock—Food products from diseased animals—Tuberculosis of animals in some of its relations to human tuberculosis—The cattle industry of the United States—Lamb feeding in Colorado—Cattle markets and abattoirs in Europe—The dairy industry and dairy markets of Porto Rico, with notes upon St. Thomas and Cuba—Statistics of oleomargarine, oleo oil, and filled cheese, 1900 and 1901—The business of breeding purebred stock—Market classes of horses—The Angora goat industry—The musk ox—American breeds of fowls—A variety of the hog cholera bacillus which closely resembles bacillus typhosus—Note on branched forms of tubercle bacilli found in cultures—The use of eggs as a medium for the cultivation of bacillus tuberculosis—Virulence of the bovine tuberculosis bacillus for monkeys—Results of the work against sheep scab in 1901—Contagious diseases of animals in foreign countries—Miscellaneous information—Imports and exports of animals and animal products—Numbers and values of farm animals in 1900—Wool Statistics of 1900—Pork packing in the United States—Live stock and the markets—Rules and regulations of the Bureau of Animal Industry issued in 1901.

This is a Congressional publication, and but a limited number is assigned to the Department, the remainder being for distribution by Senators, Representatives, and Delegates in Congress.

Report of the Secretary of Agriculture. 1902. Pp. 96. (Report No. 73).

Foods and Food Control. By W. D. Bigelow, Chief of Food Laboratory. Pp. vi, 189–272. (Bulletin No. 69, Part III, Bureau of Chemistry.) Price 5 cents.

Food laws of Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, and New Mexico.

Foods and Food Control. By W. D. Bigelow, Chief of Food Laboratory. Pp. vi, 273–372. (Bulletin No. 69, Part IV, Bureau of Chemistry.) Price 5 cents.

Food laws now in force in New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, and the Philippine Islands.

Foods and Food Control. By W. D. Bigelow, Chief of Food Laboratory. Pp. vi, 373-461. (Bulletin No. 69, Part V, Bureau of Chemistry.) Price 5 cents.

A compilation of the food laws of Porto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

Manufacture of Table Sirups from Sugar Cane. By H. W. Wiley. Pp. 32, pls. 10, figs. 2. (Bulletin No. 70, Bureau of Chemistry.) Price 10 cents.

Report of Irrigation Investigations for 1901. Under the direction of Elwood Mead, Chief of Irrigation Investigations. Containing summary of results by R. P. Teele and reports by W. M. Reed, W. H. Code, A. J. McClatchie, E. W. Hilgard, W. Irving, A. E. Chandler, O. L. Waller, D. W. Ross, Samuel Fortier, A. P. Stover, O. V. P. Stout, H. J. Waters, F. H. King, E. B. Voorhees, and J. C. Nagle. Pp. 401, pls. 64, figs. 12. (Bulletin No. 119, Office of Experiment Stations.) Price 50 cents.

Proceedings of the Seventh Annual Meeting of the American Association of Farmers' Institute Workers, held at Washington, D. C., June 24, 25, and 26, 1902. Edited by A. C. True and D. J. Crosby, for the Office of Experiment Stations, and G. C. Creelman, for the Association. Pp. 119. (Bulletin No. 120, Office of Experiment Stations.) Price 10 cents.

Experiment Station Record. Vol. XIV, No. 3. E. W. Allen, Ph. D., Editor. Pp. viii, 205-308. Price 10 cents.

Experiment Station Record. Vol. XIV, No. 4. E. W. Allen, Ph. D., Editor. Pp. x, 309-412. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly, the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

La Changa, O Grillotalpa (*Scapteriscus didactylus* Latr.) en Puerto Rico. Por. O. W. Barrett, Entomologista y Botanista, Estación de Experimentos Agrícolas de Puerto Rico. Bajo la dirección de La Oficina de Estaciones Experimentales, Departamento de Agricultura, E. U. A. Pp. 20, fig. 1. (Boletín No. 2, Estación de Experimentos Agrícolas de Puerto Rico.) Price 5 cents.

Eucalypts Cultivated in the United States. By Alfred James McClatchie, M. A., Agriculturist and Horticulturist of the Arizona Experiment Station, Phoenix, Arizona. Pp. 106, pls 96. (Bulletin No. 35, Bureau of Forestry.) Price \$1.00.

Information concerning the characteristics of the Eucalypts, their climatic requirements, and their uses; directions and suggestions as to their propagation and culture; and means of identifying seedlings and mature trees.

Budding the Pecan. By George W. Oliver, Expert, Seed and Plant Introduction and Distribution. Pp. 20, frontispiece, pls. 7. (Bulletin No. 30, Bureau of Plant Industry.) Price 10 cents.

Describes difficulties encountered in pecan budding, why the pecan should be budded, and methods to be employed.

Cultivated Forage Crops of the Northwestern States. By A. S. Hitchcock, Assistant Agrostologist, in Charge of Cooperative Experiments, Grass and Forage Plant Investigations. Pp. 28, pls. 7. (Bulletin No. 31, Bureau of Plant Industry.) Price 10 cents.

Discusses the forage resources of that portion of the United States extending from Colorado and central California north to Montana and Washington.

Road Conventions in the Southern States, and Object-Lesson Roads Constructed Under the Supervision of the Office of Public Road Inquiries, with the Cooperation of the Southern Railway. Prepared under the direction of Martin Dodge, Director. Pp. 89, pls. 11. (Bulletin No. 23, Office of Public Road Inquiries.) Price 15 cents.

Foot-and-Mouth Disease; Warning to All Owners of Cattle, Sheep, and Swine. By D. E. Salmon, Chief of Bureau. Pp. 3. (Circular No. 38, Bureau of Animal Industry.)

Description of the disease, how it may be recognized, what owners should do to protect their stock, and urgent necessity of making an immediate report of the first symptoms causing suspicion.

Monthly List of Publications. November, 1902. Pp. 4. (No. 451, Division of Publications.)

REPRINTS.

Bulletin No. 8, Division of Vegetable Physiology and Pathology.—The Principal Diseases of Citrous Fruits in Florida. Price 10 cents.

Circular No. 46, Office of Experiment Stations.—The Functions and Uses of Food.

Circular No. 21, Division of Forestry.—Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands.

Constitution and By-Laws of the American Association of Farmers' Institute Workers, with Amendments Proposed at the Seventh Annual Meeting, Washington, D. C., 1902. (Reprint from Bulletin No. 120, Office of Experiment Stations.)

FARMERS' BULLETINS.

Practical Suggestions for Fruit Growers. By H. P. Gould, Assistant Pomologist, Pomological Investigations, Bureau of Plant Industry. Pp. 28, figs. 8. (Farmers' Bulletin No. 161.)

A brief discussion of some of the fundamental factors which enter into the successful and progressive management of fruit plantations.

REPRINTS.

No. 55.—The Dairy Herd: Its Formation and Management.

No. 106.—Breeds of Dairy Cattle.

No. 126.—Practical Suggestions for Farm Buildings.

No. 154.—The Home Fruit Garden: Preparation and Care.

PUBLICATIONS OF THE WEATHER BUREAU.

[For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.]

Monthly Weather Review, September, 1902. Vol. XXX, No. 9. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 433-472, charts 8. (W. B. 275.) Price 20 cents; \$2 per year.

Monthly Weather Review, October, 1902. Vol. XXX, No. 10. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 473-510, charts 5, figs. 2. (W. B. 276.) Price 20 cents; \$2 per year.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1902) reporting temperature and rainfall with reference to their effect on crops. (No. 30, for the month of November, 1902.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

Snow and Ice Bulletin for Tuesdays, December 2, 9, 16, 23, and 30. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers.)

PUBLICATIONS NOT AVAILABLE.

International Conference on Plant Breeding and Hybridization. (From Experiment Station Record, Vol. XIV, No. 3.)

A Partial List of the Coccidæ of Ohio. (Reprinted from Bulletin No. 37, new series, Division of Entomology.)

Report of the Chief of the Division of Accounts and Disbursements for 1902. (From Annual Reports, Department of Agriculture.)

Report of the Librarian for 1902. (From Annual Reports, Department of Agriculture.)

Report of the Chief of the Bureau of Soils for 1902. (From Annual Reports, Department of Agriculture.)

Approved:

JAMES WILSON,

Secretary of Agriculture.

GEO. WM. HILL,

Editor and Chief.